Southwest Florida Water Management District

WATER USE PERMIT

INFORMATION MANUAL

PART B

BASIS OF REVIEW

December 12, 2011

PEF313
June 26, 2012

GLOSSARY

annual average daily quantity-the total quantity authorized by the District to be withdrawn from water sources in one year, divided by 365 days and expressed in gpd.

aquifer-geologic materials that contain ground water in pore spaces and which are permeable enough to yield useful quantities of this ground water to wells and to natural springs.

augmentation-the transfer of water from one water source to another for the purpose of maintaining or raising the water level of a surface water body.

cone of depression-the vertical depression of the water table and/or the potentiometric surface of aquifers in the shape of an inverted cone that develops around a well which is being pumped (U.S.G.S, August, 1989).

confining unit-a hydrogeologic unit which is composed of impermeable or distinctly less permeable geologic material than that of the aquifer it is either above or below.

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

constant drawdown-the practice of pumping a ground water well at a constant rate for sufficient duration so that the head in the source unit is reduced to a new static level.

consumptive use-any use of fresh or saline water which reduces the supply from which it is withdrawn or diverted.

desalination-a physical process where salts and other dissolved solids, in saline water or salt water, are removed. The two forms most commonly used in southwestern Florida are Reverse Osmosis and Electrodialysis Reversal.

drawdown-a relative term to describe the vertical distance that the elevation of the water table in the surficial aquifer, or the pressure head of the potentiometric surface of a confined aquifer, is lowered due to the removal of water from that hydrologic system.

drought-a condition of lower than normal rainfall within a specific time period in a defined area:

> two-in-ten drought: (2-in-10) the severity of drought which statistically occurs on the average of twice in a given ten-year period.
>
> five-in-ten drought: (5-in-10) the severity of drought statistically occurs on the average one-half of a given ten-year period. Also known as 5-in-10 rainfall, or average rainfall.

effluent, treated wastewater-the product of secondary treatment of a waste liquid at a wastewater treatment plant for removal of various components of sewage material. Also known as treated effluent or treated sewage effluent.

elevation-height in feet relative to National Geodetic Vertical Datum (NGVD), land surface, or some other point of reference. The point of reference must be stated. Used synonymously with "altitude" when referring to water levels.

evapotranspiration-a combined rate of removal of water from land and water surfaces by evaporation into the atmosphere, and transpiration from plants.

existing legal use-permitted current use of the water resource in accordance with Rule 40D-2.041, F.A.C., permitting thresholds, and Rule 40D-2.051, F.A.C., exemptions.

fresh water-water that contains less than 3,000 milligrams per liter (mg/l) of total dissolved solids (TDS). Also, water having a TDS concentration between 1,000 mg/l and 3,000 mg/l can be termed slightly saline fresh water; and, generally, water having a TDS concentration greater than 500 mg/l TDS is undesirable for drinking and many industrial uses.

ground water well-any artificial excavation into the ground for the purpose of locating, acquiring or withdrawing, developing, or artificially recharging ground water from a confined, semi-confined, or unconfined aquifer.

hydraulic conductivity-the rate at which water can move through rock or earth measured perpendicular to the direction of movement. This rate is usually expressed as feet per day (ft/d). (See transmissivity.)

hydroperiod-the frequency and duration during which there is free standing water in a wetland or other depression in the ground.

impoundment-The accumulation of water in an artificial reservoir using a mechanical device to gather or impound water from a flowing watercourse for temporary or permanent containment.

irrigation facility-the facilities used to withdraw water from one source, transport the water to a destination and apply the water to a plant or a crop.

mine plan-a drawing to scale which depicts an applicant's or permittee's property boundaries, and which identifies the approximate time frame by month and year for areas to be mined or dewatered.

mitigate, mitigation-to make or become less severe or intense. With respect to Water Use Permitting, mitigation includes the measures and actions provided to offset, lessen, rectify or prevent adverse impacts to the environment, water resources, existing land use, or legal users of the water resources.

NGVD-National Geodetic Vertical Datum: a datum that was derived by using the average sea level over a period of many years from 26 tidal stations along the Atlantic and Pacific Oceans and the Gulf of Mexico. It does not necessarily represent local mean sea level at any one location. It was formerly referred to as the "Sea Level Datum of 1929".

peak month daily quantity-the total quantity authorized by the District to be withdrawn from water sources during the month of highest water use, divided by the number of days in that month and expressed in gpd.

plume-the volume of surface water or ground water which contains chemical constituents in excess of the Florida Department of Environmental Protection water quality standards or criteria, or which contains significantly higher concentrations of chemical constituents than ambient conditions, and is delineated by the Florida Department of Environmental Protection, the Environmental Protection Agency, or the District.

pollutant-any chemical substance, especially waste matter, which when introduced into the air, water or soil contaminates them by producing conditions unfit or harmful to living things.

potable water-water suitable for human consumption as set by the State Safe Drinking Water Act.

potentiometric surface-a surface defined by the level to which water rises in an open pipe that is constructed into or all the way through an artesian aquifer. This is measured in feet relative to NGVD or sea level. The level to which water rises inside this open pipe is a function of the pressures on the water in the artesian aquifer.

reclaimed water-water that has received at least secondary treatment and is reused after flowing out of a wastewater treatment facility (Chapter 62-610.200(39), F.A.C.). There are various grades of reclaimed water governed by the Florida Department of Environmental Protection.

reuse-the deliberate application of reclaimed water, in compliance with the Florida Department of Environmental Protection and District rules, for a beneficial purpose (Chapter 62-610.200(41), F.A.C.).

runoff-surface water that leaves the property on which it was either deposited as rainfall, or from which it was derived via a ground water well or surface water body withdrawal facility.

safe yield-the amount of water that can be withdrawn from a hydrologic system without causing adverse impacts.

saline water-water that generally is considered unsuitable for human consumption or for irrigation because of its high content of dissolved solids. Commonly expressed as milligrams per liter (mg/l) of dissolved solids, with

moderately saline as 3,000-10,000 mg/l; very saline as 10,000-35,000 mg/l, and brine as more than 35,000 mg/l (U.S.G.S., August, 1989).

saline water interface-any plane or surface within the transition zone between fresh water and saline water that is defined by a specific concentration of total dissolved solids.

saline water intrusion-the movement of more saline water laterally inland into a fresher water aquifer from coastal areas, or the movement of more saline water vertically upward into a fresher water aquifer. Also, any movement of more saline surface or ground water into a fresher-water surface water body.

sealing water well-a ground water well used in mining operations which cools and lubricates the pumps used to move the mined material in slurry pipelines.

seasonal high water level-the maximum elevation to which the ground water or surface water can be expected to rise due to the rainfall occurring in a normal wet season.

seawater-water in any sea, gulf, bay, or ocean having a total dissolved solids concentration greater than or equal to 10,000 milligrams per liter (mg/l) (very saline). Also, the component of very saline water in a surface body of water or an aquifer that is continuously open to a sea, gulf, bay, or ocean that has a total dissolved solids concentration of greater than or equal to 10,000 mg/l.

semi-confined aquifer-a fully saturated aquifer which underlies a confining unit that is leaky. It may or may not overlie a leaky confining unit.

service area-for a public supply water use permit, it is the area to which potable water is supplied by a utility or water supply authority.

serviced area-a geographical region that is not owned by a water use permittee, but is supplied with water from the water use permittee's water withdrawal facilities.

staff report-a written District document which permits and describes a water use, and which lists limiting conditions for the continued use of the water. Also known as "Water Use Permit," and "Final Agency Action."

staged drawdown-in dewatering systems, the practice of pumping the source unit to discrete, incremental levels.

stream-any river, creek, slough, or other natural water course (Rule 40D-1.102, F.A.C.)

system efficiency/assigned irrigation efficiency-the ratio of the volume of irrigation water available for actual crop use to the volume delivered from the irrigation system. This ratio is always less than 1.0 because of losses due to evaporation, wind drift, deep percolation, lateral seepage and runoff which may occur during irrigation

unconfined aquifer-an aquifer which is not fully saturated with water and which has a free water table open to the atmosphere. The portion of the aquifer that does not have all its pore space filled with water is the unsaturated zone; the portion that has all of its pore space filled with water is the saturated zone. The top of the saturated zone is the water table. An impermeable rock or clayey sediments often underlies unconfined aquifers.

upconing-process by which saline water, which underlies fresh water in the same or different aquifers, rises up into the fresh water zone as a result of pumping water from the fresh water zone (U.S.G.S., August 1989).

watercourse-the bed or channel of a waterway; a continuously or intermittently flowing body of water.

water table-the surface of water in an unconfined aquifer where that aquifer becomes fully saturated with water, and at which the pressure is equal to one atmosphere.

Water Use Caution Area-a geographic region within the District which exhibits resource problems, or is predicted to exhibit resource problems, and for which special regulations are enacted by the Governing Board.

wellfield-an area of multiple ground water wells under one water use permit, for one use type category. The wells may or may not be located on contiguous land parcels.

wetland-areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support (and under normal circumstances do or would support) a prevalence of vegetation that is adapted for life in saturated or seasonally saturated soils. These include, but are not limited to, swamps, marshes, bayheads, cypress ponds, sloughs, wet prairies, wet meadows, river overflows, mudflats and natural ponds.

withdrawal facility-any ground water well, surface water intake system, or other artificial water diversion facility which is used to withdraw water from one location for use at another location.

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United States Geological Survey, "Federal Glossary of Selected Terms, Subsurface Water Flow and Solute Transport," Ground Water Subcommittee of the Federal Interagency Advisory Committee on Water Data, August, 1989.

ACRONYMS AND ABBREVIATIONS

AFSIRS	Agricultural Field Scale Irrigation Requirements Simulation
AWS	alternative water supplies
BEBR	University of Florida Bureau of Economics and Business Research
CFCA	Central Florida Coordination Area
DCA	State of Florida Department of Community Affairs
EM	environmental mitigation
ERP	environmental resource permit
EPA	U.S. Environmental Protection Agency
F.A.C.	Florida Administrative Code
F.S.	Florida Statutes
District	Southwest Florida Water Management District
FDEP	Florida Department of Environmental Protection
gal/day/ft^2	gallons per day per square foot
GC	golf course
gpcd	gallons per capita per day
gpd	gallons per day
gpm	gallons per minute
IC	industrial/commercial
IFAS	Institute of Food and Agricultural Sciences
MGD	million gallons per day
mg/L	milligrams per liter
MSSW	management and storage of surface water
NAVD	North American Vertical Datum
NGVD	National Geodetic Vertical Datum
PERMPPH	permanent resident persons-per-household
pph	persons per household
PPSC	Power Plant Siting Certificate

PSC	Public Service Commission
RPC	Regional Planning Council
RW	reclaimed water
ST	stormwater
SU	significant uses
SWUCA	Southern Water Use Caution Area
SCS	U.S. Soil Conservation Service
SEASPPH	census year seasonal households
TDS	total dissolved solids
USGS	U.S. Geological Survey
WAFR	wastewater facility regulation
WD	withdrawals
WUCA	water use caution area
WUP	water use permit

1.0 PERMITTING PROCEDURES

1.1 OBJECTIVES.

Chapter 373, Florida Statutes (F.S.), enables and directs the Southwest Florida Water Management District (District) to regulate the use of water within its jurisdictional boundaries. The District has adopted rules for the consumptive use of water, which are set forth in Chapter 40D-2, Florida Administrative Code (F.A.C.). The objective of this Manual is to identify the usual procedures and information used by District staff in permit application review. The purpose of the Water Use Permit Program is to ensure that those water uses permitted by the District are reasonable and beneficial, will not interfere with any presently existing legal use of water, and are consistent with the public interest.

1.2 PERMITS REQUIRED.

1. Permits are required in accordance with the thresholds identified in Rule 40D-2.041, F.A.C., for the use of fresh and saline, ground and surface water sources. The use of seawater and treated wastewater effluent does not require a Water Use Permit.

2. In addition, in the area designated as the Most Impacted Area of the Eastern Tampa Bay Water Use Caution Area as set forth in Rule 40D-2.801(3)(b)2., F.A.C., withdrawals from wells with a cumulative outside diameter of greater than 6 inches constructed after April 11, 1994 require a Water Use Permit. This requirement does not apply to any proposed well less than 6 inches in diameter at the surface when it is of the same diameter or smaller than a well it replaces and an application to plug the replaced well in accordance with Rule 40D-3.531, F.A.C., is filed with the application to construct the replacement well in accordance with Rule 40D-3.041, F.A.C. (For related rules on this issue, see Chapter 40D-2.041, F.A.C.)

Revised 1-1-07.

1.3 PRE-APPLICATION CONSIDERATIONS.

If the application is for a project which involves complex issues or if an Applicant requires assistance in completing an application, a pre-application meeting between the Applicant and District staff may be useful to discuss complicated matters and assist the Applicant in determining the information needed in the application. A pre-application discussion may aid in expediting the application evaluation process by identifying items that need to be addressed initially. This process allows the Applicant to submit a more complete application and may prevent delays in processing the application.

OTHER FACTORS INFLUENCING PERMIT APPLICATIONS.

Frequently, other government agencies, organizations, or affected citizens have an interest in the outcome of a permit. It may be advisable for the Applicant to contact these agencies or groups prior to submitting a formal application to the District in order to obtain a permit in a timely manner. Issuance of a Water Use Permit by the District does not relieve the Applicant of the responsibility to obtain all necessary federal, state, local, or other District permits or authorizations.

PHASED PROJECTS.

The District encourages planning for long term water needs in order to compare the demands of the project with water availability. Applicants for projects that are to be developed in phases should consider their water needs for all phases of the proposed project. The District evaluates permit applications based on demonstrated needs for the term of the permit; therefore, Applicants should focus their water-use projections for the term of the permit.

1.4 APPLICATION FORMS.

Permit applicants shall submit the appropriate Individual, General or Small General Water Use Permit application form and supplemental form or attachment form as provided in paragraph 40D-2.101(2), F.A.C. Applicants for a Letter Modification to their water use permit shall submit the Modification Short Form, incorporated by reference in paragraph 40D-2.331(2)(b), F.A.C. These forms may be obtained from any District Service Office, or from the District website at www.watermatters.org.

New 1-1-03, Revised 11-25-07, 12-30-08, 7-1-09.

1.4.1 SOUTHERN WATER USE CAUTION AREA APPLICATION FORMS.

All Permit Applicants in the Southern Water Use Caution Area (SWUCA) shall submit the "Supplemental Form–Southern Water Use Caution Area," Form No. LEG-R.007.02 (04/09), incorporated by reference in subsection 40D-2.101(6), F.A.C., in addition to the appropriate application and supplemental form(s) described in Section 1.4, above. Permit Applicants in the SWUCA shall also submit the following application and supplemental

forms as appropriate for their situation and intended water use type as described in Chapters 3 and 4 of Part B of the Basis of Review for Water Use Permit Applications, of the Water Use Permit Information Manual and incorporated by reference in Rule 40D-2.101, F.A.C.:

1. "Net Benefit Supplemental Form-Southern Water Use Caution Area," Form No. LEG-R.010.01 (4/09).
2. "Southern Water Use Caution Area Ground Water Replacement Credit Application," Form No. LEG-R.011.02 (8/11).

All SWUCA application forms may be obtained from the District's website at www.WaterMatters.org or from any District Service Office.
New 11-25-07, Revised 5-12-08, 7-1-09, 8-30-09, 1-27-10, 4-27-10, 12-12-11.

1.4.2 DOVER/PLANT CITY WATER USE CAUTION AREA APPLICATION FORMS.

All permit applicants in the Dover/Plant City Water Use Caution Area (Dover/Plant City WUCA) shall submit the "Dover/Plant City Water Use Caution Area Supplemental Form" –Form No. LEG-R.050.01 (8/11) incorporated by reference in subsection 40D-2.101(7), F.A.C., in addition to the appropriate application and supplemental form(s) described in Section 1.4, above. Applicants in the Dover/Plant City WUCA shall also submit the "Net Benefit Supplemental Form Dover/Plant City Water Use Caution Area" – Form No. LEG-R.051.00, (12/10), incorporated by reference, in subsection 40D-2.101(7), F.A.C., as appropriate for the intended water use as described in Chapters 3, 4 and 7 of the WUP Basis of Review described in 40D-2.091, F.A.C. All application and supplemental information forms may be obtained from the District's website at www.WaterMatters.org or from District offices.
New 6-16-11, 12-12-11.

1.5 APPLICATION SUPPORT INFORMATION.

Applications for large withdrawals or for withdrawals in hydrologically or environmentally sensitive areas may require detailed site-specific information in support of the application. The supporting information may include an aquifer test program, water quality surveys, well inventories, and environmental assessments. The need for supporting information will be based on the size of the proposed withdrawal, aquifer characteristics in the region, sensitivity of the environment, density of nearby existing withdrawals, and proximity of existing data. Persons who are considering an application for a permit may meet with District staff to discuss the type and amount of detailed site-specific information needed to support the application. Applicants proposing to construct new wells may want to submit as part of their application a completed Proposed Well Construction Location and Design Form, Form No. LEG-R.006.01 (4/09), incorporated by reference in subsection 40D-2.101(5), F.A.C, to provide information concerning the proposed well design. Copies of the form are available from the District's website at www.watermatters.org or from District offices.
Revised 8-30-09.

1.6 APPLICATION REVIEW PROCESS.

Once the permit application and appropriate information supplements are received, District staff will identify any deficiencies in the application and request any needed information within 30 days of receipt. District staff will evaluate the application in terms of water needs and potential impact and may request clarification of the information submitted. District staff will work with the Applicant to obtain all of the information necessary to support the application. However, it is the Applicant's responsibility to provide the information requested. Staff will notify the Applicant when all information has been received and the application is complete. Once the application is complete, the District must issue or deny the permit within 90 days. Typically, permits authorizing withdrawals < 500,000 gpd will be issued or denied within 60 days.
Revised 1-1-07, 12-24-07, 12-30-08, 11-2-09.

1.7 POTENTIALLY AFFECTED PARTIES.

Upon receipt of an individual permit application, the District will require the applicant to publish notice in a newspaper of general circulation in accordance with Rule 40D-1.603, F.A.C. Upon receipt of a general permit application, the District will post notice of receipt of the application pursuant to subsection 40D-1.603(2), F.A.C. The District will also provide notice of receipt of a water use permit application to any applicable county or city government from which boundaries the withdrawal is proposed to be made. At the option of the applicable county or city government, the District will provide the notice via regular mail or electronic mail. The notice to the applicable county or city government will include information, when applicable, that the application is for a relocation or is a competing application pursuant to Section 373.233, F.S. Interested persons may request to be provided notice of agency action on a permit application.

The District will provide a notice of agency action on each permit to those interested persons who have requested to be notified of agency action pursuant to Rule 40D-1.603(5), F.A.C., as well as the permit applicant.

Affected persons may request a hearing on the agency action within 21 days of receipt of the notice in accordance with Chapter 120, F.S., Chapter 28-106, F.A.C., and Rule 40D-1.1010, F.A.C.
Revised 1-1-07, 9-10-08.

1.8 EXISTING UNPERMITTED USE.

Any unpermitted use of water will be evaluated as a new use; this includes existing unpermitted uses and permitted uses that have expired. Facilities that are already constructed will not receive preference in favor of issuance of a Water Use Permit.

1.9 PERMIT DURATION.

Revised 8-23-07, 2-13-08, 12-30-08, 4-27-10, Repealed 6-30-10.

1.9.9 DURATION OF PERMITS UTILIZING ALTERNATIVE WATER SUPPLIES WITHIN THE SWUCA OR THE DOVER/PLANTCITY WUCA.

Permits for the development of Alternative Water Supplies (AWS) that require a water use permit in the SWUCA or the Dover/Plant City WUCA shall be separately issued from other water use permits that the applicant may receive for non-AWS. Subject to Section 373.236, F.S., where required and issued, a permit for the development of AWS shall have a duration of 20 years, if requested by the applicant for a new, extended or renewal permit and provided that the water use is intended to be in place for that duration. A longer duration may be granted provided that the conditions of Section 373.236(5), F.S., are met.
1-1-03, Revised 1-1-07, 6-16-11.

1.10 TRANSFER OF PERMITS.

1. Total Transfers.

a. Where a permit has been issued to a party whose ownership or legal control of the permitted water withdrawal facilities subsequently terminates, the party that subsequently owns or controls the permitted water withdrawal facilities must apply to transfer the permit to himself or herself within 45 days of taking ownership or control, notwithstanding the provisions of Chapter 40D-1.6105, F.A.C. The District will transfer the permit if the source, use, and quantity remain the same. All terms and conditions of the permit shall become binding on the transferee. If the transferee has an existing water use permit serving contiguous land at the time of acquiring the transferred permit, the District shall modify the transferee's existing permit to reflect the transfer. If the transferee proposes a change in the terms or conditions of the permit, the transferee must apply for a modification. If the transferee proposes a change in the water use classification, the transferee must apply for a new permit.

b. Until the permit is transferred or a new permit obtained, the party subsequently controlling the permitted water withdrawal facilities will be in violation of these rules for making any withdrawals without the required permit.

2. Partial Transfers.

a. Where a permit has been issued to a party whose ownership or legal control of a portion of the permitted water withdrawal facilities subsequently terminates, the party that subsequently owns or controls the permitted water withdrawal facilities must apply to transfer the permit in part to himself or herself within 45 days of taking ownership or control, notwithstanding the provisions of Chapter 40D-1.6105, F.A.C. The District will transfer that portion of the permit quantity relating to the conveyed water withdrawal facility or conveyed land if the use remains the same, provided the transferee submits a complete water use application and fee. All relevant permit conditions of the transferor's permit shall apply to the transferee's permit. If the transferee proposes a change in the terms or conditions of the permit, the transferee must apply for a modification. If the transferee proposes a change in the water use classification, the transferee must apply for a new permit. The District shall modify and decrease the transferor's permit by the quantities transferred to the transferee's permit. If the transferee has an existing water use permit serving contiguous land at the time of acquiring the partially transferred permit, the District shall modify the transferee's existing permit to reflect the transfer.

b. Until a portion of the permit is transferred or a new permit obtained, the party subsequently controlling a portion of the permitted water withdrawal facilities or a portion of the land on which the facilities are located, will be in violation of these rules for making any withdrawals without the required permit.

(For related rules on this issue, see Chapter 40D-1.6105, 40D-2.351, 40D-2.381, F.A.C., and Sections 2.1 and 6.1, Basis of Review for Water Use Permit Applications.)

1.11 RENEWAL OF PERMITS.

1. Applications for permit renewal may be made at any time within 1 year prior to permit expiration, except as provided in Basis of Review Section 1.12. Permittees are encouraged to apply for renewal at least 90 days prior to

the expiration date. Permits for which renewal applications have been timely submitted consistent with the provisions of 40D-1.603(8), F.A.C., and are under evaluation by the District shall remain in force past the expiration date until final action is taken by the District, or if the permit is denied or the terms of the permit limited, until the last day for seeking review of the District action or a later date fixed by order of the reviewing court.
1-1-07, Revised 8-23-07, 4-7-08, 12-30-08.

1.12 MODIFICATION OF PERMITS.

1. Formal Modification.

a. The terms and conditions of a permit may be modified at any time during the term of a permit. Any proposed change in the terms or conditions of a permit (e.g., a change in a crop or acreage or the quantities needed) requires submittal of an application for modification. Ordinarily, only the modified aspects of the permit will be addressed in the evaluation of the application for modification. Therefore, in most cases the original expiration date will remain on a modified permit. However, if the modification is deemed to be substantial by the District, as described in the paragraph below, the applicant may request that it be addressed as a renewal application with modification. Applicants who wish to change a portion of their current permit may submit an application for modification or the District may require modification of a permit to address a problem with the existing permit.

b. An application to modify a permit shall be deemed by the District to be substantial if the amount of effort, time and materials required to be submitted to complete the application and the amount of effort, time and documentation required of District staff to evaluate the submission are similar to that required for a renewal application for the same permit. Upon request by the applicant, the District shall process the application for modification as a renewal application with modification notwithstanding that it is submitted prior to one year before the permit expiration date.

2. Letter Modification.

a. Applicants may submit a modification short form to modify an existing permit by letter provided:

(1) The annual average daily withdrawal will not increase by more than 100,000 gpd, or more than 10% of the total.

(2) The use of the water will not change.

(3) The modification does not cause the total annual average daily quantity to equal or exceed 500,000 gpd.

(4) The proposed changes would not cause adverse impacts beyond those considered in the initial permit.

(5) The modification does not request an extension of a permit term;

(6) The modification does not request a Self-Relocation.

(7) The proposed change is not an increase in water withdrawals that are projected to impact a water body in the SWUCA that is below or is projected to be below its established Minimum Flow or Level Water.

b. A letter modification shall be used to activate Standby Quantities where there is a loss of AWS as described in Section 3.1, Chapter 3 of this Basis of Review, in the paragraph titled "Loss of Alternative Supplies."

c. There is no limit to the number of letter modifications that can be requested during the permit term, provided that the sum total of the withdrawal quantity modifications does not exceed the criteria presented in this section.

d. If the District determines that a request for letter modification does not meet the qualifications stated above, the applicant will be informed that the desired changes must be made through the formal modification process, and the request for letter modification will be returned to the applicant and will not be deemed to be an application.

(For related rules on this issue, see Chapter 40D-2.331, F.A.C.)
Revised 1-1-07, 8-23-07.

1.13 REVOCATION AND CANCELLATION OF PERMITS.

A permit may be revoked, following notice and hearing, for the following reasons:

1. Non-use of the water granted in the permit for a period of at least 2 years, unless the permittee can demonstrate extreme hardship.

2. If it can be demonstrated that the permittee made false statements in the permit application or supporting materials.

3. If the withdrawal causes significant adverse impacts to the water resources, environmental systems, or existing legal users, and the permittee does not modify the activities or satisfactorily mitigate the impacts.

4. If the permittee willfully violates any of the terms or conditions of the permit or any provision of Chapter 40D-2, F.A.C.

The District may administratively cancel a permit for the either of the following reasons:

1. The permittee or permittee's authorized agent requests that the permit be cancelled.
2. The permit has been abandoned, except as described in Rule 40D-2.341(2)(d), F.A.C.

The permittee requesting cancellation shall ensure that all ground water wells have been either properly capped or plugged and abandoned according to Rule 40D-3.531, F.A.C., and all surface water withdrawal points have been dismantled. Prior to an administrative cancellation, District staff shall perform a site visit to confirm these requirements have been met. In the case where the permit has been abandoned as described above, all ground water wells must be plugged and abandoned according to Rule 40D-3.531, F.A.C., by the permittee.

1.14 PERMIT COMPLIANCE.

Repealed 4-7-08.

2.0 ADMINISTRATIVE CONSIDERATIONS

This section describes administrative requirements which may apply to certain water users. All water users must demonstrate legal control over the property and activities for which they are requesting a permit. Certain water users may be required to comply with other requirements described in this section.

2.1 CONTROL OF PROPERTY AND ACTIVITIES.

1. Applicants must demonstrate ownership or legal control of all property on which pumps, wells, diversions or other water withdrawal facilities are or will be located. Applicants seeking renewal or modification of a water use permit authorizing withdrawals of less than 100,000 gpd on an annual average basis will not be required to demonstrate continued ownership or legal control, provided current property appraiser records confirm that there is no change in property ownership or control from what is documented in District records for the permit to be renewed or modified. Except for Self-Relocations as described below, applications for leased property, except property leased from the District, must be either a joint application in the name of the lessee and the property owner(s) or be only in the name of the property owner(s). If there are multiple property owners, all owners must sign the permit application form or sign an attachment to the permit application form indicating their joinder in the permit application, and all property owners will be permittees on the water use permit, when issued. In the case of an application for Self-Relocation, a permit may be issued solely to the lessee if the lessee and the permittee on the permit to be Self-Relocated are identical. For related rules on this issue, see Rules 40D-1.6105, 40D-2.351, and 40D-2.381(3)(p) and (q), F.A.C., and Section 1.10 and 6.1, Basis of Review for Water Use Permit Applications.

2. A governmental entity which owns the land on which the pumps, wells, diversions or other water withdrawal facilities for public water supply are or will be located need not be a permit applicant or a permittee, notwithstanding paragraph 2.1 1. above, provided that: a) it is not a distributor of the water, b) it does not receive any financial benefit from the water withdrawals or the applicant's use of the land or facilities, c) it agrees in writing to the issuance of a water use permit for withdrawals from its land, and d) another entity is the applicant and will operate the water withdrawal facilities. In these instances, the entity that is operating the water withdrawal facilities shall be the applicant and the permittee on the water use permit.

3. Public agencies with the power of eminent domain shall be considered to have legal control of property on which pumps, wells diversions or other water withdrawal facilities are or will be located, as described in the permit application. When a public agency relies on its power of eminent domain for legal control of property, if all other conditions for issuance have been met, the District shall recommend issuance of the permit with a condition requiring the public agency to acquire ownership or legal control of the property within 1 year after the permit issuance. If the public agency has not acquired all of the property described in the permit application within 1 year, the applicable portions of the permit shall be deemed abandoned and shall become void. If the public agency does not acquire the property within 1 year after permit issuance due to extreme hardship caused by factors beyond its control, the District may grant an extension of time to the agency. In no case shall issuance of a permit convey any property rights to the applicant.

4. A water user shall obtain one permit for all withdrawals that are intended to serve contiguous property. For example, an agricultural operation that has four wells should apply for one permit. However, public water suppliers shall obtain a separate permit for each wellfield or other source, even though the wellfields may serve contiguous property. Applicants with multiple non-contiguous parcels in the same locale under their control may apply for one permit for water use encompassing all such parcels.

5. For local government applicants, permits will be issued to the county or municipality and not to an individual administrative department within the government.

6. Permittees shall periodically confirm that the permittee's use of the water continues to be consistent with the permit (e.g., irrigation of 100 acres of citrus) and that the permittee is the person or entity currently conducting the water use authorized by the permit. The dates for this confirmation will be specified in water use permits based upon the use type authorized by the permit and the likelihood that the water use activities and information in the permit will change over the duration of the permit.

Revised 1-1-07, 5-12-08, 6-30-10.

2.2 WATER USE INTEGRATED WITH A SURFACE WATER MANAGEMENT SYSTEM.

1. For projects that require both an Environmental Resource Permit (ERP) and a Water Use Permit, an application for an ERP must be deemed complete prior to issuance of the Water Use Permit when the design of the surface water management system can affect the quantities developed from the project site and the quantities needed to supply project water demands from other sources. The applicant may submit an application for a Conceptual ERP

to satisfy this requirement, provided that the application contains information from which supplemental irrigation demands, potable water demands, other water use demands, and water supply quantities derived from the surface water management system can be calculated. Otherwise, the applicant must submit an application for an Individual or General ERP. Phosphate mining projects are not required to have complete ERPs prior to WUP issuance. This requirement is based on the fact that design changes may occur during the Surface Water Permit evaluation process which may impact the water use aspects of the project. The impact of withdrawals on the Applicant's existing or conceptually permitted surface water management system must be evaluated and submitted with the Water Use Permit Application. This evaluation shall include an assessment of the impacts of withdrawals and discharges on the surface water management system design in terms of percolation rates, storage volumes, and design discharge.
Revised 6-30-10.

2. If the District determines that a permit application involves an area where there are water resource problems, and due to quantity, type or location of the proposed withdrawal it is unlikely that a water use permit will be issued, the requirement for a complete ERP application shall be waived by the District. Where such waivers are granted, and if a Water Use Permit is issued, it shall specify that a well construction permit will not be issued and withdrawals cannot commence until the appropriate District ERP is issued.
Revised 6-30-10.

3. Where a project requires a complete ERP pursuant to Rule 40D-2.302(2), and Basis of Review Section 2.2.1, the permittee shall be required to re-evaluate water demands and sources at the submittal of any General or Individual ERP applications pertaining to the project. If the re-evaluation indicates sources or demands have changed from those presented in the original application, or that required water conservation elements have not been achieved, the water use permit shall be modified, to take into account the updated information, provided, however, that the water use shall continue to meet all conditions for issuance of a water use permit.
New 6-30-10.
(For related rules, see Chapters 40D-2.101(6) and 40D-2.301(2), F.A.C.)

2.3 TEMPORARY WATER USE PERMITS.
Repealed 3-30-93.

2.4 PROFESSIONAL CERTIFICATION OF SUPPORTING DOCUMENTS.

Analysis, plans and designs which require certification by a registered Florida Professional Engineer or a Florida Professional Geologist pursuant to Chapters 471 or 492, F.S., shall be signed and sealed as provided by law.

2.5 PUBLIC WATER SUPPLY SERVICE AREA.

Public water supply applicants and their wholesale customers that operate “community water systems” defined by the Florida Department of Environmental Protection (FDEP) in Rule 62-550.200, F.A.C., as serving at least 15 service connections used by year-round residents or that regularly serves at least 25 year-round residents, shall be considered public water supply “utilities.” For the purposes of this rule, an entity which submeters a master-metered connection to a utility and bills for the metered water use is not considered a public water supply utility.
Revised 4-27-10.

Public water supply permit applicants, including Wholesale Public Supply Permit applicants, shall define the entire area for which they have the ability and legal right to distribute water directly to their customers during the term of the permit. Although a public water supply applicant may have separate, discrete service areas, if water is routinely transferred between service areas, the service areas shall be considered one. Applicants that have a public water supply water use permit and have interconnected service areas and that receive an annual average quantity of 100,000 gpd or greater from another permitteee are not required to obtain a separate Wholesale Public Supply Permit, but shall include these quantities as imported quantities in the application. An applicant’s public supply service area is composed of the following, unless the applicant demonstrates that factors unique to its utility make one or more of these situations inapplicable to the determination of the applicant’s service area:

1. The current and projected geographic retail service area for which a public water supply utility intends to provide potable water.

2. The current and projected geographical retail areas of a public water supply utility that is not required to have a Wholesale Public Supply Permit but which purchases water wholesale from the Applicant regardless of whether the wholesale water recipient bills its customers.
Revised 4-27-10.

The area for which a Wholesale Public Supply Permittee distributes potable water, whether or not the Wholesale Public Supply Permittee bills customers for that water, is not included in the wholesale supplier's service area.
Revised 4-27-10.

Public water supply permit applicants with a defined service area must submit an up-to-date map of the service area with clearly marked, identifiable boundaries at the time of application for a new permit, permit modification (not letter modification) or permit renewal. The map submitted must clearly show any changes to the service area relative to the service area depicted in the District's electronic public supply area boundary map. The map must clearly delineate the current area served from any proposed service area(s) if the current and proposed areas are not the same, and the applicant is applying for quantities for the proposed service area. A new service area must be delineated relative to service areas depicted in the District's electronic public supply service area boundary map maintained in the District's Mapping and GIS system and shall not overlap other service areas. The map may be paper or District compatible electronic file format. During the term of the permit, if the service area is changed, an up-to-date service area map shall be provided in the next Annual Report. With each service area map submittal, the following information must be included:

1. A current general utility contact person name, title, email address and phone number.
2. A current contact person name, title, email address and phone number whom District staff may call concerning the service area map.
3. The metadata for the map if the map is submitted as an electronic file that is compatible with the District's format.
4. The District permit numbers and FDEP Public Water Supply Identifier numbers and area designation names for each service area or sub-service area, as applicable.
5. An indication of routine water transfer interconnections between service areas and other utilities or wholesale suppliers or recipients.
6. The name, contact person, phone number, and District permit number(s) of each utility that purchases water from the permittee on a routine basis and the quantity purchased for the previous calendar year in millions of gallons per day (MGD).
7. The name, contact person, phone number, and District permit number(s) of each utility that the permittee purchases water from on a routine basis and the quantity purchased for the previous calendar year in MGD.

Definable areas within a service area which are served by domestic potable wells shall be delineated and designated by the permittee as non-served areas unless documentation such as a capital improvement plan is provided that demonstrates that the area will be supplied by the applicant within the term of the permit. Quantities shall not be permitted for overlapping service areas or service areas that are in dispute.
New 1-1-07, Revised 4-27-10.

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2.6 PUBLIC SERVICE COMMISSION TERRITORY.

Public supply applicants regulated by the Public Service Commission (PSC) must submit with their application a copy of the PSC certification describing the service area. If the Applicant proposes to add a new area not contained in the existing PSC certification, a permit condition will require that PSC certification for the expansion be acquired within 2 years of the permit's issuance.

2.7 ELECTRICAL POWER PLANT SITING CERTIFICATES.

The Electrical Power Plant Siting Act is implemented through Chapter 17-17, F.A.C. The certification process described in this Chapter provides that entities proposing to develop power generation facilities shall submit one application encompassing all the activities associated with the proposal to the FDEP. As part of the certification process, the District reviews the proposal to ensure that the project meets all District permitting criteria set forth in Chapter 40D-2, F.A.C. The procedures for obtaining a power plant certification are as follows:

1. Pre-application conference is held at DEP in Tallahassee with Applicant, DER, and other interested agencies.
2. Applicant may request separate meeting with District staff to discuss issues regarding surface water and consumptive use.
3. Applicant files application for PPSC with DER.
4. DEP distributes copies of PPSC application to interested agencies.
5. Agencies have 45 days within which to submit requests for additional information to DER.
6. DEP compiles questions submitted by each agency and sends them to the Applicant.
7. Applicant responds to DER's request for additional information.

8. Agencies may request clarification of information supplied by Applicant.

9. DEP coordinates all information supplied by Applicant and ensures that each agency's questions have been satisfied.

10. DEP compiles the recommendations of each agency and develops a recommended PPSC.

11. An Administrative Hearing is held on the proposed PPSC.

12. The Governor and Cabinet take final action on the PPSC.

When the District receives a PPSC application from DER, it contains all information submitted by the Applicant. PPSC Applicants are encouraged to use District application forms to facilitate and expedite review. District staff must review the entire application and determine which aspects of the project involve water use, surface water, or well construction permitting issues. District staff then present recommendations to the Governing Board for approval prior to submitting comments to DER. Upon approval by the Governor and Cabinet, the Applicant receives a PPSC rather than separate permits from each agency; therefore, no District permits are issued.

A PPSC may be modified, either at the initiative of the Certificate-holder or as a result of the necessity to remain in compliance with agency rules. The procedure for modification follows the same steps outlined for a new project, except that only the portion of the project being modified needs to be reviewed. If the modification is not related to District permitting, the District will submit a letter to DEP stating that the District has no comment on the modification.

3.0 REASONABLE WATER NEEDS

This section describes the factors involved in determining appropriate permit quantities for a particular water use. The quantity of water needed is a function of demand for water, efficiency of the water treatment and distribution systems, water acquired from other sources, water sold or transferred to other entities, and conservation practices employed. Section 3.1 describes the factors to consider in determining the appropriate quantities. Section 3.2 describes the units in which the quantities are identified on the permit. The remaining sections (3.3 through 3.7) describe the procedures for estimating water needs using the components of demand for each water use type. The information to be provided by permit applicants as described in this Chapter is required for all new water use permits and for renewal or modification of all existing water use permits, with the exception that applicants seeking to renew or modify water use permits authorizing withdrawal quantities of less than 100,000 gpd on an annual average basis will not be required to submit documentation with their application if the documentation requested has previously been submitted or the information is documented in District records and the applicant's water use needs have not changed since the previously issued permit or permit revision.

3.1 DETERMINING REASONABLE QUANTITIES.

REASONABLE DEMAND.

Proper accounting for each proposed water use is essential to establish that the use is reasonable, beneficial, and in the public interest. In addition, proper accounting of the various water uses enables the District to better estimate water use and to implement water shortage plans. Sections 3.3 through 3.7 identify the components of demand that must be identified for Applicants for each water use type. Demand information may be estimated from historical data, comparable uses, and acceptable forecasting techniques.

The reasonable water needs of all applicants for initial permits, renewals, and those for New Quantities and Self-Relocation within the SWUCA or the Dover/Plant City WUCA for frost/freeze protection will be closely evaluated by the District. For all renewals and for Self-Relocations in the SWUCA or the Dover/Plant City WUCA for frost/freeze protection, the evaluation period will be the previous permit term, taking into account climate variability, market conditions, and other factors that influence water withdrawals. Permittees who have not utilized the full previous allocation because circumstances prevented full implementation of the plan on which the allocation was based will be required to demonstrate that the need for the full allocation will occur within the next permit term. To support any future needs, this demonstration must include substantive documentation of the proposed need such as materials orders, construction plans or an operations or business analysis or plan that otherwise specifically justifies the requested quantities. In such cases, the permit shall be conditioned to reduce the permitted quantities should the proposed need not develop. For water uses affected by rainfall, the demonstration may include information showing the relationship between actual effective rainfall amounts affecting demand occurring over the previous permit term and any statistical rainfall analysis upon which the previous permit allocation was based that contributed to the permittee’s ability to use less than the full previous allocation. This paragraph shall be construed to provide for the allocation of sufficient quantities to meet the permittee’s reasonable-beneficial needs during drought conditions as otherwise set forth in this Chapter 3 and consistent with the District’s authority to address such uses during declared water shortages and emergency water shortages.

New 1-1-07, Revised 4-27-10, 6-16-11.

SYSTEM EFFICIENCY.

In some circumstances, not all water that is withdrawn is actually used. This circumstance may be a result of losses in the system during distribution, or because the water must undergo a treatment process before it is usable.

Distribution Efficiency.

The amount of water lost from the system during distribution may occur because of leakage or because a system has been developed with a certain design efficiency. In either case, Applicants may be asked to identify the amount of water lost during distribution.

Treatment Effect.

Some water treatment technologies, such as desalination or sand filtration, may cause significant portions of the withdrawn water to be unusable. In such cases, the Applicant may be required to indicate the withdrawal quantity or imported quantity treated, the percent product (usable) water, the percent reject (unusable) water, and the manner in which the reject water will be disposed.

Revised 4-27-10.

OTHER SOURCES OF WATER SUPPLY.

Applicants must identify the quantities obtained from sources other than the primary source of supply. These sources may include reclamation facilities or desalinated seawater. If a source is not reliable throughout the year, the Applicant may request standby withdrawal quantities from the main source of supply, which may be used when the temporary supply is not available. The permit will identify these standby quantities, when they likely will be required, and for what length of time. The permittee may request that the District extend the period of time on the permit during which a standby quantity may be used if the need arises.

For non-governmental applicants for water supply for residential developments where all or a portion of the indoor and outdoor use is supplied by another entity (imported), the quantity allocated for irrigation shall not exceed the quantity that, in combination with the imported quantity, is within the allowable per capita limitation for public supply use for that development.

Revised 4-27-10.

ALTERNATIVE WATER SUPPLIES.

Alternative Water Supplies.

Applicants for permits with 100,000 gpd or greater quantities on a standard annual average basis will be required to evaluate the technical, economic and environmental feasibility of using AWS. This evaluation must determine whether alternatives are available to offset all or part of quantities obtained from any non-alternative water supply, as well as whether an offset is only available seasonally or on a time-limited basis.

1-1-07, Revised 12-30-08, 4-27-10.

Multiple Water Supply Sources.

Where an applicant or permittee has non-AWS and AWS, the AWS shall be used in lieu of non-AWS to the greatest extent practical, based on economic, environmental and technical feasibility.

1-1-07, Revised 4-27-10.

Beneficial Reuse.

The following uses shall be considered beneficial reuse of treated domestic wastewater :

1. Landscape irrigation of golf courses, playing fields, cemeteries, parks, playgrounds, school yards, retail nurseries and commercial, industrial and residential properties.
2. Agricultural irrigation of food, fiber, fodder and seed crops, wholesale nurseries, “cut flowers,” sod farms and improved pastures.
3. Ground water recharge where such recharge results in environmental or water supply benefit.
4. Industrial uses for cooling water, process water and wash waters.
5. Wetlands restoration.
6. Fire protection.
7. Environmental enhancement, including discharges to surface waters to replace withdrawals.
8. Other useful purposes accepted by the District or allowed under a DEP permit pursuant to Chapter 62-610, F.A.C.

1-1-03, Revised 4-27-10.

Reuse Feasibility Investigation.

Investigation of the feasibility of the use of reclaimed water (reuse) shall be required for all applicants for and permittees with permits for a standard annual average daily water demand of 100,000 gpd or greater, and reuse shall be required where economically, environmentally and technically feasible. The feasibility investigation shall include an analysis of reclaimed sources for the area, including the location of these sources relative to the location of use, the quantity and timing of reclaimed water availability, costs associated with obtaining the reclaimed water, the suitability of reclaimed water for the intended use, and an implementation schedule for reuse. Infeasibilty shall be supported with a detailed explanation. For those Water Use Permit applicants and permittees also required to investigate reuse pursuant to Section 403.064, F.S., the investigation shall be in accordance with Section 403.064, F.S., and any rules promulgated thereunder. Reclaimed water suppliers whose reclaimed water is 100% reused, reclaimed water users whose water use is 100% reclaimed water, and permittees with a reuse plan already accepted by the District, shall not be required to conduct a reuse feasibility study.

1-1-03, Revised 4-27-10.

Small General Water Use Permit applicants who have not incorporated AWS will be required to confirm that there are no Alternative Water Supply sources that are technically, economically and environmentally feasible to use as a water source for the applicant's intended use. Small General Water Use Permits will be conditioned to require that the permittee notify the District of any future connection to an Alternative Water Supply source, and the permit will be modified to require the permittee to use the Alternative Water Supply to the greatest extent practicable.
1-1-03, Revised 12-30-08.

All Individual and General Water Use Permit applicants for water uses where reclaimed water is appropriate to meet some or all of the applicant's demand shall provide documentation from the local wastewater entity that holds a water use permit indicating whether reclaimed water is available or is planned to be available within the requested permit term. Permittees generating reclaimed water shall respond to such requests by permit applicants in a timely manner. If reclaimed water is available, or is planned to be available within the requested permit term, the local wastewater entity that holds a water use permit shall provide a cost estimate for connection to the permit applicant. If reclaimed water is planned to be available within the requested permit term, the local wastewater entity that holds a water use permit shall provide an estimate of when the reclaimed water will become available. If the wastewater generator does not hold a valid water use permit and does not supply the requested information, the applicant shall be required to prepare a cost-estimate for connection.
Revised 12-30-08, 4-27-10.

Permittees capable of using reclaimed water will be required to accept it when it becomes available, provided that the quantity and quality are acceptable for the intended use, as determined by the District. If the reclaimed water generator provides the reuse connection, acceptance is required, provided that the quantity and quality of the reclaimed water are acceptable for the intended use, as determined by the District. If the permittee must pay for all or a part of the cost of connection to the reclaimed water source, the permittee may present an economic feasibility report to the District demonstrating whether connection is feasible.
Revised 12-30-08, 4-27-10.

Use of Reclaimed Water for Golf Course Communities.

If a proposed golf course is linked with a residential development with its own domestic wastewater treatment plant, the applicant must submit estimates of wastewater generation with time, and will be required by permit condition to implement a phased conversion to reclaimed water when sufficient quantity is available. When use of AWS is implemented, the fresh water sources will be permitted for standby purposes in case of a failure of the reclaimed water supply.
1-1-03, Revised 1-1-07, 4-27-10.

INVESTIGATE DESALINATION WITHIN THE SWUCA.

1-1-03, Repealed.

PERMITS WITH ALTERNATIVE WATER SUPPLIES IN THE SWUCA OR DOVER/PLANT CITY WUCA .

New Permits.

If an application includes the use of AWS to supply all or a portion of the requested demand, and the applicant demonstrates that, through no fault of the applicant, the AWS are vulnerable to becoming unavailable, insufficient or unsuitable for the authorized use, upon request by the applicant, a permit will be issued that puts use of the non-alternative source on standby status, provided the withdrawal and use of the non-alternative water supply source meets all the conditions for issuance. The standby quantity will be for an amount equal to the quantity offset by the AWS. This standby quantity is to be used only when the AWS become unavailable, insufficient or unsuitable; or economically, technically or environmentally infeasible for the authorized use. In no case will the standby quantity exceed the permitted quantity.
New 1-1-07, Revised 6-16-11.

Existing Permits.

Where AWS provide all or a portion of permitted quantities, and if requested by the applicant, a permit will be issued that puts use of the water source on standby status, in an amount equal to the quantity offset by the AWS. This standby permit is to be used only when, for reasons outside the permittee's control, the AWS become unavailable, insufficient or unsuitable for the authorized use; or economically, technically or environmentally infeasible. In no case will the standby quantity exceed the permitted quantity.
New 1-1-07.

Loss of Alternative Water Supplies.

Where a permittee is to use an Alternative Water Supply in lieu of a non-Alternative Water Supply and the Alternative Water Supply becomes temporarily (exceeding 30 days) insufficient or unsuitable, the permittee shall notify the District in writing within 15 days of the event. Such notification shall be submitted monthly for each subsequent 30 days, for up to one year from the date of first loss, while the supply of AWS remains insufficient or unsuitable for the authorized use. During this time, the withdrawal of standby quantities is allowed to meet the authorized use up to the maximum amount of the permitted standby quantities. If the loss of the AWS exceeds one year, the District shall issue a Letter of Modification, subject to all requirements of Rule 40D-2.331(2), F.A.C., to modify the non-AWS quantities that may be withdrawn. If the standby permit is for a withdrawal within the SWUCA or the Dover/Plant City WUCA,, a Letter of Modification shall be issued to modify the quantities that may be withdrawn even if the quantities to be withdrawn exceed the quantity thresholds included in Rule 40D-2.331(2), F.A.C.

New 1-1-07, Revised 6-16-11.

SALES OR TRANSFERS OF WATER.

Applicants who sell or transfer water must identify the quantity transferred and the receiving entity. The Applicant providing the water must account for the receiving entities' demand.

Applicants who acquire water from other entities must identify the quantities and the provider. Since the providing entity will account for the demand in its permit, the receiving entity must not.

If the sale or transfer is arranged after the permit is issued, the providing Applicant must notify the District of the sale or transfer. Both the provider's permit and the receiver's permit may require modification.

WATER CONSERVATION REQUIREMENTS.

All applicants, except those for letter modifications, must demonstrate that environmentally, technically and economically feasible water conservation measures applicable to the proposed use have been or will be employed. Applicants shall address relevant water conservation practices, recycling, and water conserving technologies applicable to the proposed water uses. Conservation measures and requirements appropriate to each Use Type are described in the remainder of this Chapter.

Water savings expected to result from the implementation of water conservation measures must be estimated and accounted for when calculating demand projections. Applicants must identify the components of demand affected by each conservation measure and reflect the estimated savings in demand for each year projected.

Where historical data are used to support the calculation of projected demand and peak month coefficients and conservation measures were implemented for only part of the historical data period, the Applicant should use data only from the period in which the conservation measures were in effect. If the Applicant is able to estimate and extrapolate the water savings to the data period prior to implementation, then historical data from the past period may also be used.

1-1-07, Revised 4-27-10.

PERMITTEE REPORTING OF ALTERNATIVE WATER SUPPLY QUANTITIES.

Annual Reclaimed Water Supplier Report.

Water Use permittees with a permit for 100,000 gpd or greater standard annual average daily demand and that generate treated wastewater effluent (reclaimed water) at their own wastewater treatment facility having a reclaimed water design capacity of 100,000 gpd or more on an annual average basis and a FDEP Wastewater Facility Regulation (WAFR) identification number shall submit the SWFWMD Annual Reclaimed Water Supplier Report, Form No. LEG-R.026.00(09/09), incorporated by reference in Rule 40D-2.091, F.A.C., on or before April 1 of each year summarizing the reclaimed water supplied during the preceding period of October 1 to September 30. Appendix A to this Chapter 3 includes definitions and instructions for reporting this information.

The report shall be submitted on or before April 1 of the following year and shall also include a map of the area(s) currently served with reclaimed water, including any areas projected to be added within the next year.

Permittees having a wastewater treatment facility with a design capacity less than 100,000 gpd on an annual average basis shall have the option to use the SWFWMD Annual Reclaimed Water Supplier Report, Form No. LEG-R.026.00(09/09) described above or to submit Part F of the Public Supply Annual Report, “Suppliers of Reclaimed Water Report”, described in “ANNUAL REPORTS”, below.

1-1-03, Revised 1-1-07, 4-27-10.

Non-Potable Alternative Water Supply Providers – Other Than Reclaimed Water.

All permittees with a permit for 100,000 gpd or greater standard annual average daily water demand and that generate non-potable AWS, as defined in subsection 40D-2.021(1), F.A.C., other than suppliers of reclaimed water from a public supply wastewater treatment plant, shall submit an annual Alternative Water Suppliers report on or before April 1 of each year for the preceding calendar year as a component of the Annual Water Use Report. The report shall provide all of the following information on quantities supplied to bulk customers for non-potable use:

1. Description of the type of AWS provided.
2. County where service is provided.
3. Customer name and contact information.
4. Customer's Water Use Permit number (if any).
5. Customer's meter location connection latitude and longitude.
6. Meter ownership information.
7. General customer use category.
8. Proposed and actual flows in annual average gpd per customer.
9. Customer cost per 1,000 gallons or flat rate information.
10. Delivery mode (e.g., pressurized or non-pressurized).
11. Interruptible Service Agreement (Y/N).
12. Month/year service began.
13. Totals of monthly quantities supplied.
14. A map depicting the area of alternative water use service. This map should include any areas projected to be added within the next year.

Revised 4-27-10.

Alternative Water Supply Receivers.

All permittees with a permit for 100,000 gpd standard annual average daily water demand and that receive reclaimed water, stormwater or other AWS to meet all or a part of their combined water demands (e.g. golf courses, industrial/commercial (IC) uses, agricultural uses, etc.) shall be required to meter, record and report the meter readings on a monthly basis. These permittees shall also meter, record and report the quantity of AWS beneficially used on a monthly basis. These permittees shall include in their initial report the AWS supplier's name, address, telephone number, email address, and contact person's name, water use permit number (if any), and contracted or agreed-upon annual average quantities of AWS to be supplied, and thereafter report changes to this information. Where an applicant demonstrates that an economic, technical, environmental, legal or other hardship would be created for a meter to be installed on an AWS distribution system existing as of [effective date of rule], the permittee may use an alternative accounting method that the applicant demonstrates to be equivalent in accuracy in determining the quantity of AWS received and beneficially used.

1-1-03, Revised 1-1-07, 4-27-10.

3.2 PERMITTED WITHDRAWAL QUANTITIES.

Applicants must identify the quantities needed for each component of demand in order to justify the quantities requested on the permit application. The components of demand for each use type are identified in Sections 3.3 through 3.7. Typically, requested quantities are based on historical information. Applicants shall request quantities in gpd for each component of demand according to the terms listed below. The District will evaluate the quantities requested and identify the following quantities allocated in gpd on each permit.

1. Annual Average Daily (gpd)
2. Peak Month Average Daily (gpd)
3. Maximum Daily (gpd)

The annual average daily quantity places a limit on total yearly withdrawals. The peak month average daily quantity places a limit on total withdrawals in any one month. A maximum daily quantity may be permitted for certain needs on a case-by-case basis. (e.g. public supply permittees that record daily pumpage and agricultural permittees that require water for frost/freeze protection). Compliance with permitted annual average daily quantities is determined based on a 12 month moving average.

Applicants may identify withdrawal quantities on a monthly basis. Monthly calculations facilitate documentation of seasonal requirements and the design of effective conservation measures to reduce peak demands. Average daily quantities may then be calculated by dividing the total period by the number of days.

EXAMPLE: Peak Month Quantity
Total pumpage for June = 9,000,000
9,000,000 divided by 30 days = 300,000 gpd

STANDARD ANNUAL AVERAGE DAILY WITHDRAWAL.

The annual average daily withdrawal quantity is determined by calculating the total quantity of water to be withdrawn over a 1-year period, divided by 365 days, which results in a gpd quantity. Each Applicant must determine the annual average quantity by adding the quantities required by each component of demand for the particular use. The total demand is then considered along with other factors affecting withdrawals such as treatment losses; other sources of water; conservation and water purchased, sold, or transferred to determine the annual average daily withdrawal quantity.
Revised 1-1-07.

DROUGHT ANNUAL AVERAGE DAILY WITHDRAWAL.

The drought annual average daily withdrawal quantity is a statistical drought irrigation quantity that is the maximum annual irrigation amount permitted by the District, annualized over 365 days. For pasture the District uses a 60% statistical rainfall probability to calculate the drought annual average daily quantity, and for plastic mulched seasonal crops the District calculates the drought annual average assuming zero effective rainfall. For crops, other than pasture, that can utilize rainfall, the District uses an 80% statistical probability (i.e., an 8-in-10 chance that there will be more rainfall) to calculate drought annual average daily withdrawal quantity. This quantity does not include cold protection.
New 1-1-07.

PEAK MONTH AVERAGE DAILY WITHDRAWAL.

The Peak Month Average Daily Withdrawal (Peak Month Quantity) represents the greatest quantity permitted to be withdrawn in any single month or 31 day period. Although the quantity is based on an entire month's pumpage, the monthly quantity is converted to average daily units, by dividing by the number of days in the month, so that all the permitted quantities have consistent units. The Peak Month Quantity is determined by identifying average monthly use (in gpd) from pumpage records for each calendar month for a period not to exceed the preceding 5 years. The 31 consecutive days or the month with the greatest pumpage in each year is determined and identified as the peak month quantity (in gpd). The peak month quantity is then divided by the recorded annual average daily withdrawal quantity for that year. This division results in the peak month coefficient. The most appropriate peak month coefficient, based on the years reviewed, is then used as a multiplier to determine proposed peak month withdrawal.

The proposed peak month withdrawal is determined by calculating the proposed Annual Average Daily Withdrawal, based on demand projections, and multiplying it by the peak month coefficient to result in the projected Peak Month Average Daily Withdrawal.

EXAMPLE: Peak Month Quantity based on calendar month method.

YEAR 1
Historical data:

Month:	J	F	M	A	M	J	J	A	S	O	N	D
MGD:	12	12	19	20	27	17	10	6	7	8	13	13

Recorded Peak month: May-27 MGD
Recorded Annual average: 14 MGD
Peak month coefficient: 27 divided by 14 = 1.9

PROJECTED QUANTITIES NEEDED.

Projected annual average: 15 MGD
Peak month coefficient: 1.9
Projected peak month quantity: 15 x 1.9 = 28.5 MGD

For new or existing non-agricultural uses without previous data to review for determining the peak month coefficient see Table C-1, in Part C of this Manual. These coefficient tables are based on District data. The Applicant may use data from other sources if the data are appropriate and properly documented.

For agriculture uses, the District will determine the peak month quantity using the agricultural water use calculation based on the modified Blaney-Criddle method, described in Part C of this Manual, or other appropriate methods.

MAXIMUM DAILY WITHDRAWAL.

The maximum daily withdrawal is permitted for certain needs where daily pumpage is recorded. Typically, this quantity is permitted for frost/freeze protection or for public supply uses where daily pumpage is recorded. This quantity may be used in other appropriate circumstances.

The demand information required for each Applicant's usage is addressed in Sections 3.3 to 3.7.

3.3 AGRICULTURE.

Applicants must demonstrate that the quantities applied for relate to reasonable irrigation, livestock, aquaculture, and other agricultural water needs. This demonstration is typically accomplished by providing information on the types and acreage of crops to be irrigated, the crop growing season, the irrigation systems used, crop establishment, application of chemicals and fertilizers, frost/freeze protection, the type and number of livestock and seasonal herd size fluctuations, and other specific use information. The reasonable demand for agricultural water use is generally composed of one or more demand components, depending on the specific agricultural use.

IRRIGATION.

Typically, the reasonable need for irrigation water use is equal to the supplemental crop requirement divided by the system efficiency or the system design capacity, whichever is less. Applicants may be asked to identify the crop, acreage, irrigation method, soil type, planting dates, and periods of irrigation for all of the following components:

1. Supplemental crop requirement.
2. Crop establishment and field preparation.
3. Chemical and fertilizer application.
4. Frost/freeze protection.
5. System efficiency.

Supplemental Crop Requirement.

The supplemental crop requirement is the amount of water needed for a particular crop beyond the amount of water provided by effective rainfall. There are several ways to determine this amount:

1. In most cases, the supplemental crop requirement is determined using the agricultural water use calculation based on the modified Blaney Criddle method, which is described in Part C of this Manual. This procedure identifies the amount of water lost to evapotranspiration and determines the supplemental crop requirement using soil type, rainfall, and other variables. In most cases, the supplemental irrigation requirement is determined for a 2 in 10-year drought condition.

2. The supplemental crop requirement also may be determined based on information including but not limited to one of the following sources:

    a. University of Florida, Institute of Food and Agricultural Sciences (IFAS) reports.
    b. United States Geological Survey (USGS), Benchmark Farms data.
    c. District Agricultural Irrigation Monitoring data.
    d. Agricultural Field Scale Irrigation Requirements Simulation (AFSIRS) method-This computer model was developed by IFAS to estimate irrigation requirements based on climatic, crop, and soil data. This procedure is discussed in Users Guide and Technical Manual, Agricultural Field Scale Irrigation Requirements Simulation, University of Florida, Agricultural Engineering Department, Allen Smajstrla, October 1986.

Irrigation for agricultural crops during periods of rainfall that is less than that which the permitted allocation is derived shall be allowed, subject to any water shortage orders in effect and provided that the quantity used is demonstrated to be no greater than the supplemental quantity needed based on the rainfall amount received and all other rule criteria are met.

Revised 4-27-10.

System Efficiency.

System efficiency is based on ratings established by IFAS listed in Table 3-1, published in Efficiencies of Florida Agricultural Irrigation Systems; Smajstrla et al. IFAS, Bulletin 247, June 1988. Applicants may demonstrate that a different factor is applicable for a particular system based on information provided by the manufacturer or other reliable information.

It is important that Applicants use the most efficient system practical for their irrigation needs. Permit conditions for issuance identified in Rule 40D-2.301 include the requirements that the use shall incorporate water conservation measures, not cause water waste and not cause harm to the water resource. The District may consider these criteria in relation to the system efficiency and the quantities permitted.

Crop Establishment and Field Preparation.

Crop establishment and field preparation quantities may be identified for water needs above the supplemental crop requirements.

Chemical and Fertilizer.

Chemical and fertilizer application water needs may be identified.

Frost/Freeze Protection.

Frost/freeze protection quantities shall be identified based on the number of acres to be protected, the crop grown, the irrigation system used, and the hours of pumpage required. If the number of hours is not known, the maximum daily quantity will be based on the best available data for frost/freeze recurrence and duration. Alternate calculations will be considered, but they must be thoroughly documented.

Frost/freeze protection quantities will be determined as set forth in Section 7.4 of the WUP Basis of Review incorporated in 40D-2.091, F.A.C., for permits within the Dover/Plant City WUCA and for any permit with frost/freeze quantities authorized to be used or withdrawn from any combination of sources that if withdrawn from groundwater alone would have the potential to impact the Minimum Aquifer Level Protection Zone established for the Dover/Plant City WUCA.

Revised 6-16-11.

Table 3-1. Irrigation Application Efficiencies Used to Determine Supplemental Irrigation

System	Percent Method	Efficiency(%)*
Micro-Irrigation	Drip	85
	Spray Jet, Spinners	80
Sprinkler Irrigation	Sprinkler (overhead, undertree)	75*
	Traveling Gun	70
	Portable Gun	65
Surface	Semi-Closed Ditch	50

*Efficiency percentages assume proper management of the irrigation system.
[+]Add 10% for tailwater recovery systems.

Source: Efficiencies of Florida Agricultural Irrigation Systems Smajstrla et al., IFAS, Bulletin 247, June 1988.

CONSERVATION REQUIREMENTS.

Permits For A Standard Annual Average Daily Water Demand of 100,000 gpd Or Greater Agricultural Use Excluding Aquaculture.

New Applicants.

Applicants for new permits for a standard annual averaged daily water demand of 100,000 gpd or greater for agriculture water use, excluding aquaculture, shall submit a water conservation plan that insures efficiency of use and provides for increasing efficiency of use by implementing environmentally, technically and economically feasible water conservation practices. At a minimum, the applicant shall include a description of how each water conservation practice listed below is addressed and indicate those that will be implemented (include an implementation schedule) those that are not applicable for the product being produced, or those that are not environmentally, technically or economically feasible (include documentation of infeasibility). The plan shall include a description of each water conservation practice and its expected implementation date. Progress reports shall be due based on the implementation schedule.

Existing Permittees.

In addition to the requirements for new applicants, above, all applicants to renew or to modify (except applicants for Letter Modifications) existing permit for 100,000 gpd or greater standard annual average daily water demand and for agriculture excluding aquaculture, shall include a report on water conservation practices not listed below that have been implemented. The report shall describe how each water conservation practice has been implemented.

New 4-27-10.

Water Conservation Practices for Agricultural Uses.

Conduct an ongoing maintenance and repair program on the irrigation system, including a system-wide survey conducted at least once per season that includes monitoring flow rates and system pressures to detect leaks and clogs; routine cleaning system components (nozzles, valves, filters, meters, etc.); checking controllers or timers for accurate operation; and monitoring meters for unusually high or low readings.

Conduct an ongoing analysis of the irrigation system efficiency, including conveyance, distribution, and application, and if storage ponds or reservoirs are used, an analysis of storage efficiencies. The analysis shall include periodic testing for application and distribution uniformity and system maintenance to irrigate efficiently.

Evaluate the feasibility of improving the efficiency of the current irrigation system, converting to a more efficient irrigation system, or installing tailwater recovery or stormwater ponds. Implement the improvements, conversion, and/or installation when it is determined to be operationally and economically feasible.

Implement an irrigation schedule that maximizes the efficiency of delivering the correct quantity of water to the root zone at the time it is needed. This practice shall include the use of tools to determine when and how much irrigation water is needed. Example of these tools include soil moisture sensors, weather stations or other climatic measuring devices, and piezometers to monitor the water table elevation.

Avoid daytime irrigation, aeration or other activities which involve spraying water into the air to the greatest extent practicable to minimize water losses from evaporation and the wind. This does not apply to daytime use of water for control of heat stress, frost and freeze protection, plant establishment, field bedding, erosion control, system maintenance or other necessary non-irrigation uses.

Reduce or eliminate irrigation runoff by monitoring irrigation duration so that only the water necessary for optimum plant growth is used, avoiding irrigation of non-crop areas, and collecting irrigation tailwater for reuse.

New 4-27-10.

Small General Water Use Permits.

Agricultural Use Excluding Aquaculture.

All applicants for Small General Water Use Permits for agricultural use, excluding aquaculture, shall agree to implement all water conservation measures that are economically, technically, and environmentally feasible, including:

1. Incorporation of water conservation practices.
2. Limiting daytime irrigation to the greatest extent practicable to reduce water losses.
3. Implementation of a leak detection and repair program as part of an ongoing system maintenance program. This program shall include a system-wide inspection at least once per season.
4. Evaluation of the feasibility of improving the efficiency of the current irrigation system or converting to a more efficient system. This includes implementation of the improvement(s) or conversion when determined to be operationally and economically feasible.
5. Implementation of an irrigation schedule that maximizes the efficiency of delivering the correct quantity of water to the root zone at the time it is needed. This practice shall include the use of tools to determine when and how much irrigation water is needed. Examples of these tools include soil moisture sensors, weather/climatic measuring devices, or piezometers to monitor the water table elevation.

New 4-27-10.

Aquaculture Use.

Applicants for new permits for a standard annual average daily water demand of 100,000 gpd or greater for aquaculture water use shall submit a water conservation plan that insures efficiency of use and provides for increasing efficiency of use by implementing environmentally, technically and economically feasible water conservation practices. At a minimum, the applicant shall include a description of how each water conservation practice listed below is addressed and indicate those that will be implemented (include an implementation schedule)

those that are not applicable for the product being produced, or those that are not environmentally, technically or economically feasible (include documentation of infeasibility). The plan shall include a description of each water conservation practice and its expected implementation date. Progress reports shall be due based on the implementation schedule.

Existing Permittees.

In addition to the requirements for new applicants, above, all applicants to renew or to modify (except applicants for Letter Modifications) existing permit for 100,000 gpd or greater standard annual average daily water demand and for aquaculture shall include a report on water conservation practices not listed below that have been implemented. The report shall describe how each water conservation practice has been implemented.

Water Conservation Practices for Aquaculture Uses.

1. Reduce offsite discharge by converting flow through systems to recirculation systems; designing new facilities with recirculation systems and design new ponds without discharge outlets; retaining and treating production water on site; utilizing reclaimed water and other alternate water sources; and incorporating water reuse practices in standard operation and management practices to reduce the quantity of water pumped or discharged.
2. Reduce water loss from ponds due to excess seepage by maintaining proper free board levels and using perimeter ditches, and reduce water loss from outdoor containments by the use of shade facilities where practicable.
3. Avoid daytime aeration or other activities which involve spraying water into the air to the greatest extent practicable to minimize water losses from evaporation and the wind. This does not apply to daytime use of water for control of heat stress or cold protection.
4. Conduct routine and ongoing maintenance and repair programs on levees, dikes and banks surrounding ponds, check for leaks from tanks, vats or raceways, and check for proper performance of perimeter ditches, filter strips, detention ponds or other facilities designed for treatment of product water treatment.
5. Conduct a system-wide survey at least once per season that includes monitoring flow rates and system pressures to detect leaks and clogs; routine cleaning system components (valves, filters, meters, etc.); checking controllers or timers for accurate operation; and monitoring flow meters for unusually high or low readings.
6. Utilize other conservation practices as identified by the University of Florida's Institute of Food and Agricultural Science's Department of Fisheries and Aquatic Sciences publication "Regulations Pertaining to Non-native Fish in Florida Aquaculture (FA121)," incorporated herein by reference.

New 4-20-10.

Small General Water Use Permits.

Aquaculture Use.

All applicants for Small General Water Use Permits for aquaculture water use shall agree that they are required by the Florida Department of Agriculture and Consumer Services in Chapter 5L-3, F.A.C., to implement all appropriate water conservation and reuse practices. The applicant shall undertake any feasible measures that can be implemented immediately and implement other feasible measures as soon as practicable, as well as implement any feasible interim measures.

New 4-27-10.

IRRIGATION-AGRICULTURE AND SELF-PROVIDED NON-PUBLIC SUPPLY WITHIN THE SWUCA.

The four major categories of irrigation-related water use are: 1) supplemental irrigation (the water delivered to satisfy the evapotranspirational need of the crop or plant); 2) field preparation/crop or plant establishment (the water delivered for tilling, bedding, fumigation, and planting); 3) other water uses (i.e. heat stress relief, chemical application, irrigation system flushing and maintenance, and leaching of salts from the root zone); and 4) crop protection. Design Aid 4, Part C, Water Use Permit Information Manual, describes in detail a methodology for calculating allocated acre-inches per acre per season for supplemental irrigation (supplemental irrigation requirements divided by the assigned efficiency standard) and the allocated acre-inches per acre per season for field preparation/crop or plant establishment (field preparation/crop or plant establishment irrigation). Other information and methods may be considered as supported by the facts in individual cases. Applicants intending to grow various crops over the term of their permit should submit an application representing the most water-intensive crop scenario intended, considering both annual average and peak month quantities needed. The permittee may then change crop types during the permit term without modification of the water use permit, provided that: a) the crop actually irrigated uses no more water than the most water-intensive crop permitted, and b) no more than the quantity that the

District permits for the acreage and plant or crop actually irrigated is used. However, the permittee should be mindful of potential surface water permitting needs that may arise if crop types are changed. The permittee should also be mindful of the difference in crop report submittal requirements for different crops.
1-1-03.

Irrigation Water Use Allocations Within The SWUCA.

Within the SWUCA, the District allocates irrigation-related water use based on AGMOD and other methods as described below. For each individual crop or plant type, the permittee shall not exceed the quantity determined by multiplying the total irrigated acres by the total allocated acre-inches per irrigated acre per season. Allocated acre-inches per irrigated acre per season are determined separately for three major categories of water use (supplemental, field preparation/crop or plant establishment, and other water uses), and their sum equals the total allocated inches per irrigated acre per season. An irrigated acre, hereafter referred to as "acre," is defined as the gross acreage under cultivation, including areas such as roads and internal ditches, but excluding uncultivated areas such as wetlands, retention ponds, and perimeter drainage ditches. Acreage submitted with applications or crop reports shall be based on planimetered measurements rather than other measurements such as rolls of plastic. Other non-irrigation related water uses shall be permitted in accordance with this Chapter 3.0, Basis of Review.
1-1-03.

Calculation of Allocation Within The SWUCA.

An applicant or permittee within the SWUCA may obtain the total allocated acre-inches per acre per season for its crops, plants, soil types, planting dates, and length of growing season by utilizing procedures described in Design Aid 4, Part C, Water Use Permit Information Manual, which is available from the District upon request, or complete the Agricultural Water Allotment Form, Form No. LEG-R.042.00 (4/09), incorporated by reference in subsection 40D-2.101(5), F.A.C., and submit it to the District. Copies of the form can be obtained from the District's website at www.watermatters.org or District offices. The District will complete and return the form calculating total allocated acre-inches and water-conserving credit per acre per season per crop based on the information provided. A permit applicant or permittee may use alternative methods for calculating water use needs subject to District review and written approval.
1-1-03, Revised 8-30-09.

Irrigation Water Use Efficiency Standards Within The SWUCA.

For irrigated crops or plants, a key component in calculating total allocated acre-inches per acre per season is the assigned "irrigation water use efficiency," hereafter referred to as "efficiency". The District determines the quantity of water that will be permitted based in part on the efficiency. This efficiency is the ratio of the volume of water beneficially used for supplemental irrigation to the volume delivered from the irrigation system. Beneficial use for crops or plants is considered to be the calculated evapotranspirational losses. The efficiency standards used in developing acre-inch per acre allocations are set forth in Table 3-2.
1-1-03.

Compliance with Efficiency Standards Within The SWUCA.

Permit conditions for issuance identified in Rule 40D-2.301 include the requirements that the use shall incorporate water conservation measures, not cause water waste and not cause harm to the water resource. The District shall consider these criteria in relation to the quantities permitted. If the permittee uses no more than the quantity that the District permits for the acreage and plant or crop actually irrigated, then it will be presumed that the permittee is in compliance with the efficiency standards set forth in Table 3-2.
1-1-03.

Table 3-2. Efficiency Standards and Rainfall Bases for Irrigation Permits Located In the SWUCA. Effective 1-1-2003, Except Pasture Effective Upon Adoption, Credits Begin 1-1-2003.

Crop/Plant	Supplemental Allocation Efficiency	Credit Calculation Efficiency	Supplemental Allocation Effective Rainfall Basis	Credit Calculation Drought Basis
Citrus[1]	75%	75% at 2003	Annual, 5 in 10	Annual, 2 in 10
Row Crops With Mulch	75%	N/A	Zero	N/A
Row Crops w/o Mulch	75%	75% at 2003	Seasonal, 5 in 10	Seasonal, 2 in 10
Nursery-Container	75%	75% at 2003	Annual, 5 in 10	Annual, 2 in 10
Nursery – Field Grown	75%	75% at 2003	Annual, 5 in 10	Annual, 2 in 10
Pasture	75%	N/A	3 months[2], 6 in 10	N/A
Sod/Turf	75%	75% at 2003	Annual, 5 in 10	Annual, 2 in 10
Field Crops	75%	75% at 2003	Seasonal, 5 in 10	Seasonal, 2 in 10
Golf Courses, Playing, Fields, Cemeteries	75%	75% at 2003	Annual, 5 in 10	Annual 2 in 10

[1]Based on 74% shaded area, equivalent to 89.4% of gross acreage once lateral movement of applied water is accounted for.
[2] Three Driest Months in County. Effective. 1-1-03, Revised 1-1-07.

Rainfall Bases Within The SWUCA.

The District uses the rainfall bases set forth in Table 3-2 in determining the Water Use Allocation.
1-1-03.

Crop Establishment And Field Preparation.

Crop establishment and field preparation quantities shall be identified by the District for water needs above the supplemental crop requirements. These quantities will be based on plant cooling and filling soil voids if necessary.
1-1-03.

Other Irrigation Water Uses.

These uses are permitted on an individual basis as follows. Chemigation, irrigation system flushing and maintenance, and leaching of salts-the total allocated acre-inches per acre per season for these uses is equal to 10% of the allocated acre-inches per acre per season of the supplemental irrigation requirement.
1-1-03.

Crop Protection.

The District allows irrigation for crop protection provided that: 1) the maximum daily quantity listed on the permit is not exceeded; 2) irrigation for this purpose will not cause water to go to waste; and, 3) permittees whose maximum daily permitted water use is equal to or exceeds 1,000,000 gpd shall document and report the beginning and ending hours and dates on the monthly pumpage report.
1-1-03.

PASTURE IRRIGATION.

Applications for the irrigation of unimproved pasture will not be approved. Authorization of water use for improved pasture may be given only for the period needed if the Applicant documents that an irrigation system exists (or is proposed) and is capable of delivering the requested amount. For proposed systems, a schedule for implementation of the irrigation system is required, and the permit will be conditioned so that the pasture irrigation quantities are invalidated if not used within the time specified.

PASTURE IRRIGATION WITHIN THE SWUCA.

Applications for the irrigation of unimproved pasture will not be approved. Authorization of water use for improved pasture shall be given based on the three driest months of the year if the Applicant documents that an operable irrigation system exists (or is proposed) and is capable of delivering the requested amount. Permitted quantities for pasture irrigation will be based on the assigned efficiency standards set forth in Table 3-2 or historical irrigation quantities or schedules, whichever is less.
Revised 1-1-07.

For proposed systems, a schedule for implementation of the irrigation system is required, and the permit will be conditioned so that the pasture irrigation quantities are invalidated if not used within the time specified.
1-1-03.

REPORTING REQUIREMENTS FOR IRRIGATION WATER USE WITHIN THE SWUCA.

To ensure compliance with the total allocated acre-inches per acre per season per crop or plant and the assigned efficiency standards, the District requires the following data to be submitted.

Crop Reports.

All permittees with permits for a standard annual average daily water demand of 100,000 gpd or greater shall record for each metered withdrawal point the following information on the applicable Irrigation Water Use Form incorporated by reference in subsection 40D-2.091(2), F.A.C., according to crop type. Applicable forms are: Irrigation Water Use Form – Annual Crops, SWUCA, Form No. LEG-R.017.01 (4/09), Irrigation Water Use Form – Summer/Fall Seasonal, SWUCA, Form No. LEG-R.019.01 (4/09), and Irrigation Water Use Form – Winter/Spring Seasonal, SWUCA, Form No. LEG-R.020.01 (4/09). Permittees who irrigate seasonal crops (examples: vegetables or other row crops) shall provide items 1. Through 8. Permittees who irrigate annual crops and plants (examples: citrus, blueberries, commercial hay, sod, nurseries, pasture) may omit items 6. and 7.:

1. Crop type.
2. Irrigated acres per crop for seasonal crops; annual irrigated acres for annual crops.
3. The dominant soil type or acres by dominant soil type.

4. Irrigation method(s).
5. Use or non-use of plastic mulch.
6. Planting dates.
7. Season length.

Forms can be obtained from the District's website at www.watermatters.org or District offices.
1-1-03, Revised 12-30-08, 8-30-09.

Additionally, use of the withdrawal point for crop protection shall be documented separately. The permittee shall note whether tailwater recovery is used. This information shall be submitted to the District on the District-supplied Irrigation Water Use Form or online by March 1 for annual crops, February 1 for summer and fall crops, and September 1 for winter and spring crops (including strawberries).
1-1-03, Revised 10-22-07, 4-27-10.

Compliance.

Compliance with allocated quantities and the assigned efficiency standards shall be determined by comparing actual use to the calculated quantities for each individual crop or plant and acreage on a per season basis. Seasonal crops will be compared on a seasonal basis (e.g. spring tomato requirements based on the calculated inches per season), and perennial crops will be compared on an annual basis (e.g. citrus requirements based on the calculated inches per year).
1-1-03.

Irrigation Pumpage Compliance Within The SWUCA.

Permittees who exceed the allocated quantities, which include standard and drought quantities as applicable, shall submit a report to the District which shall include reasons why the allotted quantities were exceeded, measures taken to attempt meeting the allocated quantities, and a plan to bring the permit into compliance. Allocated quantities are determined by multiplying the total irrigated acres by the total allocated inches per acre per season per crop. Reports for permittees not achieving the allotted quantities are subject to District approval.
Transferred from Chapters 7.1 and 7.2, 1-1-07, Revised 12-30-08.

The District will evaluate information submitted by permittees who exceed their allocated quantities to determine whether the lack of achievement is justifiable and a variance is warranted. Permittees may justify lack of achievement by documenting unusual water needs, such as unusual soil or weather conditions creating greater irrigation needs than normal. However, even with such documented justification, phased reductions in water use shall be required unless the District determines that water usage was reasonable under the circumstances reported and that further reductions are not feasible. For such permittees, on a case-by-case basis, individual efficiency criteria may be developed for each management period. Justification for the exceedance does not constitute a waiver of the District's authority to enforce the terms and conditions of the permit.
Revised 1-1-07.

Other Uses.

Quantities for other uses not related to irrigation demand shall be documented separately. Such uses may include filling of spray tanks, livestock needs, and cleaning equipment and facilities.
1-1-03.

WATER-CONSERVING CREDITS WITHIN THE SWUCA.

Initial Credits.

To encourage conservation and to account for severe climatic conditions for certain crops and plants, the District has designed a water-conserving credit system for "carrying forward" any unused permitted irrigation quantities, which may then be used as needed in subsequent years at the site for which they were earned or assigned. For crops and plants permitted based on an effective rainfall basis, an initial water-conserving credit will be assigned by the District to each permit on January 1, 2003. All crops and plants will qualify for water-conserving credits except improved pasture and crops that are grown on mulch. Crops grown on mulch do not receive or earn credits because they are assigned permitted quantities assuming zero effective rainfall, and therefore the permitted quantities are sufficient for the plants' water needs under any rainfall condition. For each qualifying crop or plant, an initial credit allocation is assigned to each permit by the District. The quantity of this initial assigned credit is equal to twice the difference between the estimated water requirements under the irrigation efficiency standards and rainfall conditions given in columns 3 and 5 of Table 3-2, and the supplementary permitted water quantity discussed above. For example, if a citrus grove is permitted for 17 inches, and the irrigation requirements for a 2-in-10 year is 19 inches, the initial credit is 2 x 2 inches =

4 inches. The water-conserving credit may be drawn upon at any time as long as the total withdrawal does not exceed the crop or plant allocation for the planted acreage under the credit rainfall condition and is not wasteful.
1-1-03.

Earned Credits.

Additional credits may be earned by the permittee beginning on January 1, 2003, if less than the amount permitted pursuant to this Chapter 3.0 is applied to actual, planted acreage as reported in the reports required by this Basis to be submitted to the District. The earned credit is equal to the difference between the amount permitted pursuant to this Chapter 3.0 for the planted acreage and the metered amount applied. There is no limit to the credit amount which can be accumulated during the term of the permit. To receive the earned Water-Conserving Credits a permittee must submit documentation between July 1 through August 31 for the previous July 1 through June 30 period to verify that the credits are in fact earned. This documentation shall substantiate the number of acres planted, the crop or plant types grown, the planting dates, the crop season length and the amount of water applied.
1-1-03.

Carry-Forward of Credits.

Upon permit renewal, both assigned and earned credits which are unused can be carried forward for use during the term of the renewed permit.
1-1-03.

LIVESTOCK.

The reasonable need for livestock use is determined by multiplying the estimated total number of animals by gallons needed per day per animal as estimated by IFAS or other appropriate sources. Unless the Applicant can demonstrate that a different factor is appropriate for the particular needs, the livestock water use will be determined using the factors identified in Table 3-3.

AQUACULTURE.

The reasonable need for aquaculture use is determined by the number and volume of ponds and tanks and their filling and recirculation requirements.

OTHER AGRICULTURAL WATER NEEDS.

The reasonable need for other agricultural uses, such as cooling of animals or product, is determined based on documentation provided by the Applicant.

DRAINAGE DISTRICTS.

Applicants who are supplied water by a Drainage or Water Control District will not be permitted separately for supplemental quantities greater than the recommended total quantity determined by the Water Management District.

Table 3-3. Livestock Water Needs

	Animal	**Use per Animal (gpd)**	
	Beef Cattle	12	
	Chickens	0.06	
	Dairy Cattle	40	Drinking
	Dairy Cattle	130	Flushing
	Goats	2	
	Hogs	4	
	Horses	12	
	Rabbits	0.05	
	Sheep	2	
	Turkeys	1	

Source: Roth, Crow & Mahoney, An Introduction to Agricultural Engineering, Avi Publishing, Inc., Westcourt, Conn., 1982.

3.4 INDUSTRIAL OR COMMERCIAL.

Applicants must demonstrate that the quantities applied for relate to reasonable office, institutional, processing and manufacturing needs. Needs are generally demonstrated by providing information on the water balance for the operation, including all sources and uses of water as well as all losses and reuses of water in production and commercial processes, personal/sanitary needs, landscape irrigation, office, or and institutional activities, treatment losses, and unaccounted uses.

Applicants for IC uses must identify the demand for each of the following components:

1. Personal/sanitary use – water for personal needs such as drinking, bathing, cooking, sanitation, or cleaning spaces. For offices and work areas, the calculation 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. Coefficients used in the calculation, such as gallons per employee or visitor, must be identified and the applicant shall reference standard source for such data. Examples of standard data sources are the U.S. Department of Energy, the AWWA Research Foundation, the Pacific Institute, the Conserve Florida on-line library, "Water Conservation Plan Guidelines", Appendix B: Benchmarks used in Conservation Planning", U.S. Environmental Protection Agency (EPA), Document number EPA-832-D-98-001, or Vickers, Amy, "Handbook of Water Use and Conservation", WaterPlow Press, 2001.

2. Process requirements-water lost in processing and manufacturing where water is an input in the process. This quantity is determined through the calculation of a water balance. (See Figure 3-1) The water balance demonstrates where water is generated and in what quantities, where water is used in manufacturing or processing and the associated losses, and where and in what quantities water is disposed of or reused. The balance may be in the form of a spreadsheet or a flow diagram that indicates all water sources and losses. All sources of water that input to the activity must be listed. Sources may include, but are not limited to:

    a. Ground water from wells.
    b. Ground water from water table dewatering or drainage.
    c. Surface water withdrawals.
    d. Collected rainfall.
    e. Recycled or reused water.

The uses of these water inputs are quantified, and the amount used and lost during each stage of the activity is calculated. All uses and losses must be listed. Uses and losses may include, but are not limited to:

    a. Water used to wash the product.
    b. Evaporation from settling/recirculation ponds.
    c. Water retained and shipped with the product (product moisture).
    d. Water used to separate or beneficiate the product.
    e. Water used to transport the product (slurry).

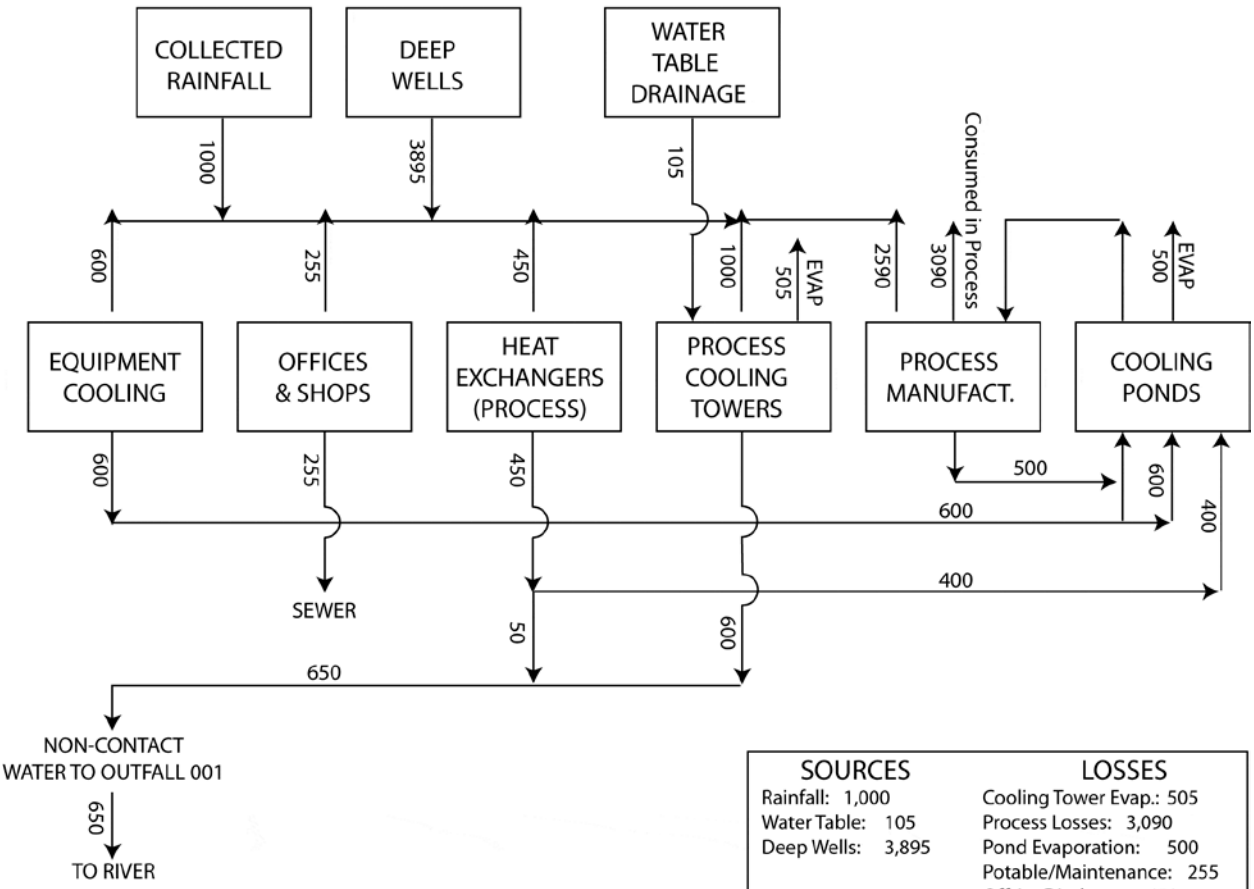
The final disposal of all water then must be identified. Disposals may include, but are not limited to:

    a. Off-site discharges.
    b. Disposal/recharge through percolation ponds.
    c. Disposal by spray irrigation.
    d. Water entrained in clay materials.
    e. Recycling of wastewater.

The amount of water withdrawn should equal the sum of the system losses and disposals.

3. Other uses-determined by calculating the total withdrawal quantity minus the quantity for the uses identified above. Other uses may include lawn and landscape irrigation, outside use, air conditioning and cooling, fire fighting, water lost through leaks, and unaccounted uses. Other uses should generally not exceed 15% of total withdrawals. Applicants with other uses in excess of 15% may be required to address the reduction of such use through identification of specific uses or the reduction of system losses.

Figure 3-1 Example Water Balance Diagram



CONSERVATION REQUIREMENTS.

Permits For 100,000 gpd Or Greater.

New Applicants.

All applicants for a new permit for 100,000 gpd or greater standard annual average daily water demand and for industrial or commercial uses shall submit a water conservation plan that insures efficiency of use and provides for increasing efficiency of use by implementing environmentally, technically and economically feasible water conservation practices relevant to the institution, industry or place of commerce will be employed. The water conservation plan shall include the relevant water conservation practices listed below and describe where and when water savings can be reasonably achieved. The plan shall specifically address reducing water use and loss, including the components in the water balance where applicable, by implementing or increasing recycling and reuse, and by limiting landscape plants to those that do not require supplemental irrigation or by utilizing water-efficient irrigation practices on landscaping that only requires minimal supplemental irrigation. A summary shall identify the components of demand affected by each conservation practice and describe the savings in demand for each year of projected water use. An implementation schedule shall be included for each proposed conservation practice, and progress reports shall be required based upon the implementation schedule.
1-1-03, Revised 12-30-08, 4-27-10.

Existing Permittees.

In addition to the requirements for new applicants, above, all applicants to renew or to modify (except applicants for Letter Modifications) existing permits for 100,000 gpd or greater standard annual average daily water demand and for industrial or commercial use shall contain a report on all water conservation practices that have been implemented as other water conservation practices not listed below that have been implemented. The applicant shall specifically address the water conservation practices listed below that are relevant to the institution, industry or place of commerce, indicating those that have been implemented. For each relevant water conservation practice from the list below that has been implemented, a report shall describe the achievements in water savings that have been realized from each practice.

Water Conservation Practices for Industrial or Commercial Uses.

1. Recycle brine from RO or filter backwash for cooling, reuse process water, install a recycling and filtering system to reuse carwash water; reuse water used to wash products; and reuse water created via processing, reuse water from settling ponds.
2. Monitor and maintain water-using equipment and valves on water lines; install automatic-close valves in equipment when not in use; check pressure and install pressure-reducing valves to match equipment needs; conduct regular checks for leakage; use shut-off nozzles on hoses, use closed loop system for equipment cooling.
3. Retrofit power generation systems to use water-conserving fuel types and reduce water needed for emission control; utilize seawater or non-fresh water for once-cooling; utilize continuous-flow, closed-loop cooling when possible.
4. Install water meters in various work areas and read monthly to identify leaks as well as monitor conservation efforts.
5. Install or retrofit to low volume showerheads and toilets, install waterless urinals, low-volume faucet aerators or faucet motion sensors; retrofit flush valves to 1 gpm and repair leaks and drips immediately.
6. Replace continuous flow equipment in kitchens, bars and cafeterias; install low flow dishwashers and only wash full loads; use automatic shut-off faucets; presoak dishes and utensils in basins or retrofit to low-volume pre-rinse sprayers; thaw frozen products using swivel aerator instead of running water, monitor/replace ice dispensers to reduce waste, and serve water in bars and restaurants only upon request.
7. Avoid excessive blowdown by adjusting boiler and cooling tower blowdown rate to maintain total dissolved solids at manufacturer's specifications; capture and reuse steam condensate as boiler feed or cooling tower make-up; use ozone as a cooling tower treatment to reduce make-up water; shut off water-cooled air conditioning units when not needed; replace water-cooled equipment with air-cooled systems; connect heating/cooling equipment to a closed-loop system rather than using a municipal supply.
8. Use full loads in sanitizers, dishwashers, sterilizers and laundry washing machines; retro-fit steam and autoclave sterilizers with water reclaimation and automatic shut-off devices; evaluate the wash formula and number of machine cycles for efficiency; use water-efficient horizontal-axis or continuous batch-reclamation washing machines; use "dry," powder methods for carpet cleaning when possible; clean windows as required rather than on a set schedule, clean work space and outdoor walkways with water brooms instead of hoses.

9. Irrigate outdoor areas early in the morning or in the evening using low-volume irrigation systems; adjust nozzles to avoid overspray, install an irrigation meter to monitor water use and possible leaks; use automatic rain shut-off devices; reduce irrigation schedule for cooler weather and the rainy season; use mulch around low-maintenance landscape plants that require minimal supplemental irrigation; reuse industrial waste water or process water for irrigation if possible, and utilize reclaimed water when feasible.

10. Lower swimming pool and spa water levels to avoid splash-out; reduce the water used to back-flush pool filters; use a pool cover to reduce evaporation and heat loss when the pool is not being used.

11. Create water conservation suggestion boxes for employees; install signs in restrooms and cafeterias that encourage water conservation; assign an employee to evaluate water conservation opportunities and effectiveness; train staff on water efficient use of machines and equipment.

1-1-03, Revised 12-30-08, 4-27-10.

Small General Water Use Permits.

The applicant shall utilize the most water conserving practices in all processes and components of water use that are environmentally, technically and economically feasible for the activity, including reducing water losses, recycling and reuse, and utilization of water-efficient irrigation practices on drought-tolerant landscaping.

New 4-27-10.

3.5 MINING OR DEWATERING.

Applicants must demonstrate that the quantities applied for relate to reasonable mining, processing, and dewatering needs. Needs are generally demonstrated by providing information on the water balance for the operation, including all sources and losses of water utilized in the mining and dewatering process, the personal/ sanitary needs of employees and customers, the type and amount of lawn and landscape to be irrigated, the schedule of irrigation, the type of irrigation system to be used, and other specific uses. The water balance should also account for changes in water needs caused by variability in the ore body, production schedules and market conditions.

Applicants for mining and dewatering uses must identify the demand for each of the following components:

1. Personal/sanitary use-water for personal needs or for household purposes such as drinking, bathing, cooking, sanitation, or cleaning spaces occupied by employees and visitors. The calculation 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 month. A quantity range from 8 gallons (for office workers and visitors) to 26 gallons (for workshop areas) per person per 8-hour shift may be used.

2. Process requirements-water lost in the actual mining, processing, and dewatering processes. This quantity is determined through the creation of a water balance. (See Figure 3-1) The water balance demonstrates where water is generated and in what quantities, where water is used in mining and the associated losses, and where and in what quantities water is disposed of or reused. If processing of materials is associated with the mining or dewatering, a water balance diagram combining these activities is preferred (to separate water balances for each activity). The balance may be in the form of a spreadsheet or a flow diagram that indicates all water sources and losses. All sources of water that input to the activity must be accounted for. Sources may include, but are not limited to:

   a. Ground water from wells.
   b. Ground water from water table dewatering or drainage.
   c. Surface water withdrawals.
   d. Collected rainfall.
   e. Recycled or reused water.

The uses of these water inputs are quantified, and the amount used and lost during each stage of the activity is calculated. All uses and losses must be listed. Uses and losses may include, but are not limited to:

   a. Water used to wash the product.
   b. Evaporation from settling/recirculation ponds.
   c. Water retained and shipped with the product (product moisture).
   d. Water used to separate or beneficiate the product.
   e. Water used to transport the product (slurry).

The final disposal of all water then must be identified. Disposals may include, but are not limited to:

   a. Off-site discharges.
   b. Disposal/recharge through percolation ponds.
   c. Disposal by spray irrigation.
   d. Water entrained in clay materials.

e. Recycling of wastewater.

The amount of water withdrawn should equal the sum of the system losses and disposals.

3. Other uses-determined by calculating the total withdrawal quantity minus the quantity for the uses identified above. Other uses may include lawn and landscape irrigation, outside use, air conditioning and cooling, fire fighting, water lost through leaks, and unaccounted uses. Other uses should generally not exceed 15% of total withdrawals. Applicants with other uses in excess of 15% may be required to address the reduction of such use through identification of specific uses or the reduction of system losses.

CONSERVATION REQUIREMENTS.

All applicants for mining or dewatering uses are required to submit a water conservation plan that insures efficiency of use and provides for increasing efficiency of use by implementing environmentally, technically and economically feasible water conservation measures. The plan shall include water conservation practices and utilization of water conserving technologies applicable to all components of demand and loss including recycling, reuse, and utilization of water-efficient irrigation practices on drought-tolerant landscaping. An implementation schedule shall be included for each water conservation measure anticipated, and progress reports shall be required based upon the implementation schedule.

In addition to the requirements for new applicants, above, the water conservation plan for renewal or modification of a mining or dewatering water use permit shall describe and quantify where and when water savings have been achieved by existing practices and identify where, when and how much water savings can be reasonably achieved by incorporating proposed water conservation measures. An implementation schedule shall be included for each proposed conservation measure, and progress reports shall be required based upon the implementation schedule.

1-1-03, Revised 4-27-10.

3.6 PUBLIC SUPPLY-APPLICANT CONSIDERATIONS.

DEMAND.

In order to accurately calculate demand, public supply Applicants must identify the demand for each of the uses listed in this section. Examples of the information required to demonstrate reasonable demand for each component include the number, type, and size of service connections; past monthly pumpage records by use type; projected permanent and temporal population data for the service area; data on the specific uses; development projections; and data specific to the forecasting models used. All required demand information is described in this section. Demand quantities shall be based on quantities required by end-use customers, not withdrawal quantities. The quantities must be expressed in average annual gpd for each component of demand.

Revised 1-20-09.

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

In applications where a portion of the demand is derived from wholesale customers (e.g., a county utility sells water to a municipality), the Applicant must obtain and report demand information from each wholesale customer. Where the wholesale customer is required to obtain a Wholesale Public Supply Permit, the Applicant shall include those wholesale quantities as exports. This information is required to demonstrate that the quantities applied for are supported by reasonable demand. Per capita use and water conservation provisions apply to wholesale customers as well as the Applicant.

Revised 4-27-10.

All public supply Applicants must identify the demand for the following components:

1. Residential use shall be divided into single-family residential use and multi-family residential use in accordance with local government zoning policies.

2. Other metered uses shall include all uses other than residential accounted for by meter.

3. Treatment losses – significant treatment process losses associated with making the water potable, such as reject water in desalination, membrane cleaning or back-flush quantities associated with sand filtration systems. Treatment losses are calculated as raw water into the plant minus treated water out of the plant. This component is identified in the water treatment plant specifications per finished gallon times the annual average gpd output. In addition, no more than 1% of treated water volume delivered to the distribution system for flushing distribution lines for potability may be deducted.

4. Water losses are equal to the total water plant output minus all accounted uses described in 1. and 2. above. Water losses include leaks, illegal connections, greater than 1% loss of plant output due to flushing of distribution lines for potability, unmeasured flows associated with fire suppression, unmetered system testing, under-registration

of meters, and other discrepancies between the metered amount of finished water output from the treatment plant less the metered amounts specified in 1. and 2. above. (Rather than water loss, the permittee may include unmetered emergency losses in the category "Fire and Other Accounted Uses" using Form B of the Public Supply Annual Report For General and Individual Permits, Form No. LEG-R.023.00(09/09) incorporated in Rule 40D-2.091, F.A.C., when the cause of the loss is fixed as soon as practicable and the quantity of water lost is estimated using pipe diameter, pressure and time.) Water losses shall not exceed 10% of total distribution quantities. Greater than 10% water losses will not be considered in allocation of permitted quantities.
1-1-03, Revised 4-27-10.

PERMIT APPLICATION DATA PROJECTIONS.

Projected Per Capita Daily Water Use.

Per capita daily water use is used to measure the reasonable withdrawal requests of public supply Applicants. Per capita water use is generally considered to be population-related withdrawals associated with residential, business, institutional, industrial, miscellaneous metered, and unaccounted uses. Projected per capita daily use is calculated by adding the quantities identified for the uses shown in the previous list, except for treatment losses, and then dividing by the permanent or temporally adjusted population of the service area.
Revised 1-20-09.

Service Area Population Projection Data.

Population data are available from the following sources: the District, Bureau of the Census, University of Florida Bureau of Economics and Business Research (BEBR), Regional Planning Council (RPC), County Planning Departments and the Comprehensive Land Use Plan (developed under Chapter 9J-5, F.A.C.). Use of population data or methods other than those provided by the District shall be considered if thoroughly documented. Counties and municipalities are required to estimate seasonal population as part of the comprehensive planning process. If such data are not available, seasonal service area population may be estimated using methods recommended by the State of Florida Department of Community Affairs (DCA). Applicants may also identify tourist population, if known.
Revised 1-20-09.

Permanent Population Projection Estimates.

In service areas without significant seasonal population fluctuations, the use of permanent population estimates is appropriate. Ten years of permanent and seasonal (if applicable) population growth must be projected, on a yearly basis, for the area served by the application.

When population estimates are required for years in between those estimates with published or referenced estimates, the Applicant must interpolate the data. The Applicant may assume that population increases in equal increments in the years between established estimates.
Revised 1-20-09.

Calculation of Seasonally Adjusted Population Projections.

In service areas where there are significant seasonal population changes, it may be to the advantage of the Applicant to estimate the seasonal population for use in conjunction with permanent population in the calculation of per capita daily water demand. If significant seasonal population fluctuations are not included, per capita water daily water use may be over-estimated. Seasonally adjusted population is a weighted population that takes into account seasonal fluctuations. Applicants are encouraged to use monthly seasonal population data where available, in its calculations of population. Where available, the applicant can request Functional Population (FP) projections that include seasonal resident population fluctuations from the District. An example of how to calculate a seasonally adjusted population for a service area that has a winter influx of residents follows.

Permanent population = 100,000 persons for eight months. The population increases during the four winter months as shown below:

November	110,000
December	110,000
January	120,000
February	120,000
	460,000

Permanent Population (100,000 x 8 months):	800,000
(Seasonal Population):	+ 460,000
	1,260,000

1,260,000 ÷ 12 months =105,000 seasonally adjusted population
Revised 1-20-09.

Calculation of Tourist-Adjusted Population Projections.

Where projected short-term tourist population data are available, the applicant may choose to include tourist population data in seasonally adjusted population estimates. For example, if November for a given year is projected to have a permanent population of 100,000, a seasonal influx of 10,000 residents, and an influx of 10,000 tourists, the November population to be used in the seasonally adjusted population calculation would be 100,000 + 10,000 + (10,000) = 120,000. Where available, the applicant can obtain projected tourist population from the District.
Revised 1-20-09.

CALCULATION OF PROJECTED PERMITTED QUANTITIES.

1. New Applicants.

New public water supply permit applicants shall be allocated an annual average daily quantity based on a projected compliance per capita rate no greater than 150 gpd, minus imports, plus a quantity that is equal to the allowable deductions and adjustments included in the calculation of a compliance per capita.
New 1-20-09.

2. Existing Permittees.

For this paragraph 2., a Five Year Compliance Per Capita Rate shall be calculated as the average of the compliance per capita rate reported in the Annual Report for 2009 and the four years prior.

a. Permittees With A Five Year Compliance Per Capita Rate No Greater Than 150 gpd As of 2009- Upon renewal or modification to address permitted quantities, annual average daily quantity allocations shall be based on the following:

i. If the projected compliance per capita rate is less than the five year compliance per capita rate, the allocation shall be based on the five year compliance per capita rate; however, the permittee shall have a compliance per capita at the end of the permit that is no greater than the projected compliance per capita rule.

ii. A compliance per capita rate that is the lesser of 150 gpd or the given year compliance per capita rates, unless the applicant demonstrates factors (e.g., there are changes in the customer classes served) that justify that a compliance per capita rate higher than the most recent five year average, but less than 150 gpd, be used, plus, a quantity that is equal to the allowable deductions and adjustments included in the calculation of the compliance per capita, minus imports.

b. Permittees With A Five Year Compliance Per Capita Rate Greater Than 150 gpd As of 2009.

In the event that the provisons of this section 2.b. conflict with the provisions of a permit or consent order existing as of January 20, 2009, the terms of the permit or consent order shall supersede this section 2.b. However, a permittee may request a modification of the permit condition or consent order in order to apply this section 2.b. in lieu of the applicable permit condition or consent order provision.

i. Upon renewal or modification to address permitted quantities, annual average daily quantity allocations shall be based on:

(a) A compliance per capita rate that is based on a year of interest allowable per capita determined pursuant to the provisions above titled "PER CAPITA DAILY WATER USE," Section D, Phase-In Where a Per Capita Rate of 150 gpd is Exceeded as of December 31, 2009.

(b) Plus, a quantity that is equal to the allowable deductions and adjustments included in the calculation of the compliance per capita minus imports.

The 2009 five year compliance per capita rate shall be calculated as the average of the compliance per capita rate reported in the Annual Report for 2009 and the four years prior.

ii. Interpolating Per Capita.

(a) For purposes of calculating a projected permitted quantity for years between 2009 and 2014, the per capita rate utilized in determining annual quantities shall be based on a linear interpolation between the five year average compliance per capita rate calculated as of 2009 and the per capita rate that is 50% of the difference between that value and the per capita rate of 150 gpd as set forth in Section D.1 of Per Capita Daily Water Use .

(b) For purposes of calculating a projected permitted quantity for years between 2014 and 2019, the per capita rate utilized in determining annual quantities shall be based on a linear interpolation between the 2014 per capita value and the per capita rate of 150 gpd.

iii. Low or No Growth In Population.

Where, based on the provisions of 2.b., above, if the quantity calculated for the last year of the proposed permit term, or ten years from January 20, 2019, whichever is earlier, is less than the quantity that is permitted as of 2009, or the most recent five year average compliance per capita rate upon renewal or modification, and the applicant's service area will have low or no growth in population, the proposed quantity shall be calculated as follows to avoid permit quantity non-compliance at the time of permit issuance or modification pursuant to the provisions of this Section 2.b. The proposed permitted quantity shall be equal to the proposed FP for the year of interest times the five year average compliance per capita rate for 2009. Permit quantity compliance shall be based on per capita reductions in accordance with the above provisions of "PER CAPITA DAILY WATER USE," section D. Phase-In Where A Per Capita Rate of 150 gpd is Exceeded as of December 31, 2009. The compliance per capita rate for years between 2009 and 2014 and between 2014 and 2019 shall be based on a linear interpolation plus allowable deductions. On January 1, 2020, the permitted quantities shall adjust to equal the lesser of the projected FP for the last year of the permit times a per capita rate of 150 gpd, or, if less, the most recent five year average compliance per capita rate, plus a quantity equal to the allowable deductions, minus imports and adjustments included in the calculation of a compliance per capita.
New 1-20-09.

3. Calculation of Annual Average Daily Quantities.

It is in the interest of the permittee to identify and document existing and projected allowable deductions from the per capita compliance formulas in the provisions titled "PER CAPITA DAILY WATER USE," above. If not accurately identified and documented, sufficient permitted quantities may not be permitted. All water quantities in the below calculations are in average gpd.

The acronyms for the variables in the following method are the same as defined in the provisions titled "PER CAPITA DAILY WATER USE," above.

The annual average daily allowable withdrawal (WD) shall be calculated using the following equations to calculate WD, TL and then an adjusted WD that includes TL:

Year of Interest Allowable Withdrawal=

Projected FP x allowable per capita rate as determined above
- Projected IM
+ Projected EX
+ Projected SU
+ Projected GC
+ Projected EM
+ Projected ST
+ Projected RW
= Subtotal Withdrawals
+ Subtotal Withdrawals x (Projected Treatment Loss Percentage) + (no more than 1% of the treated water volume for flushing distribution lines for potability)
= Total Allowable Withdrawals

New 1-20-09.

Low Persons Per Household Adjustment To Functional Population.

If the permanent resident persons-per-household (PERMPPH) (as calculated in Part D of the Water Use Permit Information Manual) for an existing service area or the projected persons per household (pph) for a new service area is less than 2.01 pph, the projected FP may be adjusted upward to reflect a pph of 2.01 if a projected compliance per capita rate of 150 gpd or less cannot otherwise be achieved. The following adjustments may not be applied to non-residential populations such as tourists or net commuters. Documentation of the adjustment is required. The permittee shall submit two sets of required population estimation spreadsheets A-I, set forth in Part D of the Water Use Permit Information Manual, as applicable, with one set to document FP using PERMPPH and SEASPPH, and the other set to document FP using 2.01 instead of PERMPPH and SEASPPH.

1. Projected Population Based Methods-If the population projection methodology isolates the residential population, then that portion of the projected population may be increased by the ratio of 2.01/PERMPPH for existing service areas or 2.01/projected pph for new service areas.

2. Projected Dwelling Unit Methods – If the population projection methodology is based on multiplying the projected number of dwelling units times a pph, a pph of 2.01 may be used in calculating the projected residential population.

New 1-20-09, Amended 12-12-11.

Reporting and Compliance with Per Capita Daily Water Use.

If the permittee achieves the 150 gpd per person per capita limit set forth in the provisions titled "PER CAPITA DAILY WATER USE" above, using the unadjusted gross per capita calculation, they will be deemed in compliance and do not have to submit data for nor calculate the adjusted gross or compliance per capita in the Annual Report.

If the permittee achieves the 150 gpd per person per capita limit using the adjusted gross per capita calculation, they will be deemed in compliance and do not have to submit data for nor calculate the compliance per capita in the Annual Report.

If the permittee achieves the 150 per person per capita limit using the compliance per capita calculation, they will be deemed in compliance.

After January 1, 2020, if the permittee cannot achieve a compliance per capita rate of 150 gpd, the permittee shall document in the Annual Report why this rate was not achieved, measures taken to comply with this requirement, and a plan to bring the permit into compliance.

New 1-1-07, Revised 1-20-09.

The District will evaluate the information submitted by permittees, including those operating under a Goal-based Water Conservation Plan, who have a compliance per capita rate greater than 150 gpd. Permittees may justify lack of achievement by documenting any unusual water needs, such as unusual plant establishment needs. However, justification for non-compliance does not constitute a waiver of the District's authority to enforce the terms and conditions of the permit. Phased reductions in water use shall be required unless the District determines that water usage was reasonable under the circumstances reported and that further reductions are not feasible, or a variance has been granted from the compliance per capita rate of 150 gpd. For such permittees, individual water conservation requirements shall be developed on a case-by-case basis.

Transferred from Chapters 7.1 and 7.2, 1-1-07, Revised 1-20-09.

WHOLESALE PUBLIC SUPPLY PERMIT REQUIREMENTS.

Wholesale Public Supply Permits are required to be obtained by those public water supply utilities that receive all water from other public supply permittees that the utility then distributes to its own customers. As of November 15, 1990 in the HR WUCA and ETB WUCA, March 1, 1991 in the original Northern Tampa Bay WUCA (NTB WUCA), July 1, 2008 in the expanded NTB WUCA, and January 1, 2003 in the SWUCA, wholesale public water supply utilities that received 100,000 gpd or more on a annual average basis were required to obtain a separate wholesale permit to effectuate conservation requirements in this section 3.6. On or before December 31, 2010, all wholesale public supply utilities that receive a combined total of 100,000 gpd or more from other permittees on an annual average basis and that have not obtained a Wholesale Public Supply Permit or other Water Use Permit shall apply for a separate Wholesale Public Supply Permit to effectuate the requirements set forth in sections 2.5 of Chapter 2, and in Chapter 3 of this Basis of Review.

Wholesale customers that receive less than 100,000 gpd on an annual average basis from another public supply utility shall not be required to obtain a Wholesale Public Supply Permit but shall utilize all water conservation measures that are economically, environmentally, and technically feasible.

Permittees that are wholesale water suppliers must provide the District with a written agreement from those that purchase less than 100,000 gpd on an annual average basis from the wholesale supplier to abide by the water conservation conditions of the wholesale supplier's permit and to provide water demand and water use data needed for the wholesale supplier to comply with reporting conditions.

1-1-03, Revised 1-1-07, 4-27-10.

COMMON AREAS DEVELOPED BY NON-GOVERNMENTAL ENTITIES.

Non-governmental applicants for a General or Individual Water Use Permit for water supply for a residential development shall identify existing and proposed acreage of Common Areas on the application and demonstrate the following:

1. AWS shall be used to the maximum extent that is technically, environmentally and economically feasible to irrigate Common Areas.

2. Irrigation of Common Areas is, or will be, minimized through minimization of the acreage to be irrigated and the use of vegetation that requires minimal supplemental irrigation, where practical.

3. The local government responsible for the issuance of building permits for the project has adopted an ordinance incorporating the principles of Florida-friendly landscaping; or, the applicant will implement landscaping consistent with Section 373.185, F.S. The applicant may demonstrate consistency with Section 373.185, F.S., by establishing that the applicant has implemented, or commits to implement, or that the applicable local government has adopted the FDEP's Landscape Guidance: Models for Ordinances, Covenants, and Restrictions, 1/09, developed pursuant to Section 373.185, F.S., which is incorporated herein by reference.

4. Irrigation systems are limited to high efficiency systems with properly installed, maintained and operational rain or soil moisture sensor shutoff devices, or evapotranspiration controller with a rainfall shutoff device and an active data subscription as applicable. Irrigation systems shall be properly maintained and incorporate the standards set forth in the Landscape Irrigation and Florida Friendly Design Standards, dated December 2006, developed pursuant to Section 373.228(4), F.S., and incorporated herein by reference. The Standards are available upon request from the District and at www.dep.state.fl.us.

For non-governmental Public Water Supply Utility applications that include quantities for residential developments after (effective date), demand for Common Area irrigation shall be met within the allowable per capita allocation.

New 4-27-10.

CONSERVATION PLAN REQUIREMENTS.

Permits for 100,000 gpd or Greater.

All applicants for a new, renewal of, or modification of (except applicants for a Letter Modification) permits for 100,000 gpd or greater for public supply shall submit a conservation plan as part of the application that demonstrates that it will provide for and increase efficiency of use by implementing environmentally, technically and economically feasible water conservation practices. At a minimum, the plan shall include a description of how each water conservation practice listed below under the heading Minimum Water Conservation Practices for Public Supply Use is or will be addressed and its actual or expected implementation date.

Progress reports shall be due with the Annual Report.

Minimum Water Conservation Practices for Public Supply Use.

1. A water-conserving water rate structure. A copy of the rate ordinance or tariff sheets for both potable and irrigation rates shall be included in the conservation plan.

2. Customer billing and meter reading practices and customer rate structure and usage information that conforms with the provisions in this section 3.6 titled "Customer Billing, Meter Reading, Rate Structure And Usage Information." A copy of bills meeting those requirements shall be included in the conservation plan.

3. An ongoing audit program of the internal and external water distribution systems to address reductions in water losses.

4. Proposed and ongoing water conservation measures and programs, the scheduled implementation dates, and an estimate of the cost and anticipated water savings for each proposed and additional measure and program. A description or a copy of these measures and programs, shall be included in the conservation plan and an identification of which, if any, were derived from the "Conserve Florida Water Conservation Guide" published by the Conserve Florida Water Clearinghouse at www.conservefloridawater.org.

5. Water conserving irrigation practices including:

(a) Minimization of lawn and landscape irrigation with supplies other than reclaimed water.

(b) Use of micro-irrigation on planting beds and other non-turf areas where irrigation is required, and minimize the acreage of irrigated lawn area.

(c) Implement Florida Friendly landscape principles and components consistent with Section 373.185, F.S. Consistency with Section 373.185, F.S. may be demonstrated by adoption by ordinances or covenants, as applicable, of the FDEP's Landscape Guidance: Models for Ordinances, Covenants, and Restrictions, 1/09, developed pursuant to Section 373.185, F.S.,which is incorporated by reference in Paragraph 3, of the Common Areas Developed by Non-Governmental Entities section above of this Basis of Review.

(d) Properly installed, and maintained and operational rain or soil moisture sensor shutoff devices or an evapotranspiration controller plus rain sensors and an active data subscription. Irrigation systems shall be properly maintained and incorporate the standards set forth in the Landscape Irrigation and Florida Friendly Design

Standards, dated December 2006, developed pursuant to Section 373.228(4), F.S., and incorporated herein by reference. The Standards are available upon request from the District and at www.dep.state.fl.us.

(e) For irrigation quantities that are supplied via a conveyance system that is separate from the indoor potable supply, individual use metering and a water conserving rate structure for irrigation quantities.

(f) Deed restrictions or covenants shall not require any of the following practices:

1. A certain percentage of residential lots to be turfgrass.
2. A specific types of turfgrasses to be utilized.
3. Lawns to be maintained at a specific color, and shall not prohibit browning during periods of dormancy or drought.
4. Resodding of lawns during drought periods.

(g) Use of AWS for irrigation.

The applicant may submit a goal based water conservation plan as described in Section 373.227(4), F.S. Additional information about these plans can be found in the Conserve Florida Water Conservation Guide at www.conservefloridawater.org.

A single document may be submitted to fulfill the plan requirement for several or all permits held by the same permittee. All permits addressed by one conservation plan must be identified within that plan.

Small General Water Use Permits.

All applicants for a Small General Water Use Permit for public supply shall incorporate water conservation measures that are environmentally, technically and economically feasible for the use. The applicant shall agree that all economically, technically and environmentally feasible water conserving measures shall be incorporated into all processes, including reducing water losses, recycling and reuse. The applicant shall promote water conservation in all components of water use, including water conservation among their customers, use water-efficient irrigation practices, and use of drought-tolerant landscaping.

GOAL-BASED WATER CONSERVATION PLANS.

A public water supply utility may propose a goal-based water conservation plan that is tailored to its individual circumstances. Progress toward goals must be measurable. If the utility provides reasonable assurance that the plan will achieve effective water conservation at least as well as the water conservation requirements adopted by the District, including per capita requirements, and is otherwise consistent with Section 373.223, F.S., the District must approve the plan which shall satisfy water conservation requirements imposed as a condition of obtaining a water use permit.

New 1-1-07.

REQUIREMENTS FOR APPLICANTS FOR GROUNDWATER WITHDRAWALS WITHIN THE CENTRAL FLORIDA COORDINATION AREA.

A. The following definitions shall apply within the Central Florida Coorination Area (CFCA):

1. "Brackish Groundwater" –groundwater in or below the Lower Floridan Aquifer that has chloride concentrations at or above 1000 milligrams per liter (mg/L) or total dissolved solids concentrations at or above 1500 mg/L.
2. "Demonstrated 2013 Demand" –the quantity of water that an applicant establishes it will need to meet demands in 2013.
3. “Due Diligence” – Taking all actions that a reasonably prudent person would take to meet the schedule requirements in the permit for developing and using all required supplemental water supplies. Particular circumstances beyond the permittee's control will be considered in determining whether due diligence has been exercised.
4. "Public Supply Utility"-any municipality, county, regional water supply authority, special district, publicly or privately owned water utility, or multi-jurisdictional water supply authority, that provides water for use by the general public.
5. “Saltwater” – ground or surface water having chloride concentrations at or above 19,000 mg/L.
6. “Similar Applicant”-an applicant, other than a Public Supply Utility, whose projected water demand after 2013, will exceed its Demonstrated 2013 Demand.
7. “Supplemental Water Supply” – surface water, stormwater, water that is reused after one or more public supply, municipal, industrial, commercial or agricultural uses, and saltwater. Brackish groundwater may be considered a Supplemental Water Supply if it can be developed in a manner that will not cause or contribute to

harmful impacts from cumulative groundwater withdrawals in the CFCA. This definition shall not govern the District's funding decisions made pursuant to Section 373.1961(3), F.S.

B. The following requirements shall apply to any Public Supply Utility applicant and Similar Applicants proposing to withdraw groundwater in the CFCA:

1. Except as provided for in paragraph 2. below, an applicant will be restricted to a maximum allocation of groundwater in an amount no greater than its Demonstrated 2013 Demand; however, an applicant may seek a duration that extends beyond 2013 for that level of allocation.

2. Any applicant seeking a permit duration extending beyond the year 2013 whose projected water demand after 2013 will exceed its Demonstrated 2013 Demand must:

a. Identify at least one specific Supplemental Water Supply project that the applicant will develop (either singly or in concert with others) and use to meet all the increase in quantity above its Demonstrated 2013 Demand, for the duration of the permit; and provide for each identified project a project development schedule, with milestones that when followed, will result in the applicant using Supplemental Water Supply by the end of 2013.

b. Provide the following**:**

i. A demonstration that the development (either singly or in concert with others) of sufficient Supplemental Water Supply to meet all the increase in quantity above its Demonstrated 2013 Demand is not economically, environmentally, or technically feasible; and

ii. Verification that will establish that the applicant will maximize the use of Supplemental Water Supply to meet as much of the increase as is economically, environmentally, or technologically feasible and will obtain any remaining portion of the increase by using water from one or more Supplemental Water Supply projects when provided by others at a cost that is economically feasible. The affordability of an increase in water rates for a Public Supply Utility's customers is a consideration in evaluating economic feasibility; however, an increase in water rates shall not, by itself, constitute economic infeasibility.

3. The restriction in paragraph B.1. immediately above on groundwater allocations to an amount no greater than a permittee's Demonstrated 2013 Demand shall not limit permitted groundwater withdrawals from:

a. Aquifer storage and recovery wells that receive only surface water, stormwater, or water that is reused after one or more public supply, municipal, industrial, commercial or agricultural uses, when the volume of water withdrawn does not exceed the volume of water injected, or

b. The surficial aquifer immediately below or adjacent to a stormwater management system or surface water reservoir where any drawdown in the surficial aquifer will be offset by recharge from the system or reservoir, or

c. An injection/recovery wellfield that injects surface water, stormwater, or water that is reused after one or more public supply, municipal, industrial, commercial or agricultural uses that is not provided to users in accordance with District rules, through one or more wells for storage within an aquifer zone and subsequently recovers it through wells from the same aquifer zone and in the same wellfield, when the volume of water withdrawn does not exceed the volume of water injected.

d. A recharge/recovery project that receives only surface water, stormwater, or water that is reused after one or more public supply, municipal, industrial, commercial or agricultural uses that is not provided to users in accordance with District rules, when the volume of water recovered does not exceed the volume of water recharged, and the drawdown due to recovery of water from the Floridan aquifer will be offset in the:

i. Surficial aquifer by recharge from the project, and

ii. Floridan aquifer by recharge from the project, except immediately adjacent to the recovery well(s).

4. In determining the amount of Supplemental Water Supply that must be used as set forth in paragraph B.2. above, the applicant may subtract the portion of its demand that the applicant demonstrates will be satisfied by water conservation and the sources identified in paragraphs B.3.a., b., c. and d. immediately above, in effect after 2013.

5. A permittee that will lack sufficient Supplemental Water Supply after 2013 from which to obtain the increase in quantity above its Demonstrated 2013 Demand shall be allocated a temporary amount of groundwater to meet that increase only if it has exercised Due Diligence to meet all schedule requirements in the permit for developing and using Supplemental Water Supply and providing that other conditions of issuance in Rule 40D-2.301, F.A.C., and Parts B and D of the Water Use Permit Information Manual are met. Any such temporary allocation shall cease when water from the Supplemental Water Supply project becomes available.

6. If an application includes a request to change the use type, or the use within a use type, supplied by groundwater during the term of the permit, such change shall not trigger the requirements to develop and/or use Supplemental Water Supply pursuant to paragraph B.2., above, and the corresponding permit duration provisions of

40D-2.321(7) and 1.9 of Chapter 1, Part B, Basis of Review, Water Use Permit Information Manual (Part B) and the CFCA permit condition described in Section 6.2.4. of Part B, provided (1) the application does not propose an increase in groundwater withdrawal above that permitted for 2013; and (2) the groundwater drawdown is no greater than that associated with the use permitted for 2013. However, the provisions of this paragraph B.6. shall not be construed to affect any condition in the existing permit regarding the development and/or use of Supplemental Water Supply.
New 2-13-08.

PERMITTEE REQUIREMENTS

WATER-CONSERVING RATE STRUCTURE.

As of November 15, 1990 in the HR WUCA and ETB WUCA; March 1, 1991, in the original NTB WUCA; July 1, 2008 in the expanded NTB WUCA; and January 1, 2003 in the SWUCA that was not previously in a WUCA, General and Individual Water Use permittees were required to adopt a water-conserving rate structure. General and Individual Water Use permittees not subject to rules in effect prior to July 1, 2008 shall adopt a water-conserving rate structure by January 1, 2012. New public water supply permittees shall adopt a water-conserving rate structure no later than two years from the date of permit issuance and shall submit the rate ordinances or tariff sheets for both potable and irrigation water, but not including reclaimed water, and a report describing the potable water rate structure and how the rate structure promotes conservation.
1-1-03, Revised, 1-1-07, 4-27-10.

CUSTOMER BILLING, METER READING, RATE STRUCTURE AND USAGE INFORMATION.

Beginning January 1, 2012, General and Individual permittees shall comply with the following requirements:

1. Customer billing period usage shall be placed on each utility-metered customer's bill.
2. Meters shall be read and customers shall be billed no less frequently than bi-monthly.
3. The following information, as applicable to the customer, shall be provided at least once each calendar year. If billing units are not in gallons, a means to convert the units to gallons must be provided. The information shall be provided by postal mailings, bill inserts, online notices, on the bill, or by other means that must be described in the permittee's Water Use Annual Report:

a. To each utility-metered customer in each customer class – Information describing the rate structure and shall include any applicable:

i. Fixed and variable charges.
ii. Minimum charges and the quantity of water covered by such charges.
iii. Price block quantity thresholds and prices.
iv. Seasonal rate information and the months to which they apply.
v. Usage surcharges.

b. Information that the customer can use to compare its water use relative to other single-family customers or to estimate an efficient use and that shall include one or more of the following:

i. The average or median single-family residential customer billing period water use calculated over the most recent three year period, or the most recent two year period if a three year period is not available to the utility. Data by billing period is preferred but not required.
ii. A means to calculate an efficient billing period use based on the customer's characteristics.
iii. A means to calculate an efficient billing period use based on the service area's characteristics.

1-1-03, Revised 4-27-10.

PER CAPITA DAILY WATER USE.

Per Capita Use Rate.

Public supply permittees shall have a per capita rate of no greater than 150 gpd whether it is calculated as an unadjusted gross per capita (see A. in this section below), an adjusted gross per capita (see B. in this section below), or a compliance per capita (see C. in this section below). A phased reduction in per capita (see D. in this section below) shall be implemented by permittees that do not achieve the compliance per capita rate of no greater than 150 gpd. Compliance with the per capita rate shall be monitored via the Annual Report and the Reclaimed Water Supplier Report that are required to be submitted by April 1 of each year for permits for 100,000 gpd or greater. (See provisions below titled "Documentation of Per Capita Daily Water Use Calculations for the Annual Report").

Increased allocations for existing permits and allocations for public supply permits with an annual average daily quantity less than 100,000 gpd shall be based on a per capita use rate no greater than 150 gpd, plus allowable

deductions and adjustments documented as set forth in the provisions below titled “Documentation of Per Capita Daily Water Use” Calculations for the Annual Report.
Transferred from Chapters 7.1 and 7.2 , 1-1-07, Revised 12-30-08, 1-20-09. 4-27-10.

A. Unadjusted Gross Per Capita Water Use.

All permittees required to submit Annual Reports must report unadjusted gross per capita defined as:

$$\frac{WD + IM\text{-}EX\text{-}TL}{FP}$$

Where:

WD = ground water, surface water and stormwater withdrawals.

IM = water imported/purchased from other supplier(s). Irrigation water, excluding RW (see C. Compliance Per Capita below), provided to the applicant’s service area by a separate utility shall be counted as imported water

EX = water exported/sold to other supplier(s)

TL = treatment loss (typically R/O or sand filtration) and no more than 1% of the treated water volume for flushing distribution lines for potability

FP = functional population is the served permanent population as adjusted by the seasonal resident, tourist, group quarters and net commuter population within a utility's service area as determined in accordance with "Requirements for the Estimation of Permanent and Temporal Service Area Populations," dated January 20, 2009, as set forth in Part D of the *Water Use Permit Information Manual*. See the paragraph titled “SERVICE AREA FUNCTIONAL POPULATION ESTIMATES” below for further information.
1-1-03, Revised 1-1-07, 1-20-09.

B. Adjusted Gross Per Capita Water Use.

Permittees with significant uses (SU), or who provide permitted quantities for golf course irrigation, or who must provide quantities for environmental mitigation as a permit condition may calculate an adjusted gross per capita. [Note: whether or not a significant use is deducted, all must be reported as provided in the "SU" section of "Documentation of Per Capita Daily Water Use Calculations for the Annual Report" below.] Adjusted gross per capita water use is defined as:

$$\frac{(WD + IM\text{-}EX\text{-}TL\text{-}SU\text{-}GC\text{-}EM)}{FP}$$

Where:

WD, IM, EX, TL and FP are as defined in A. above.

SU = Significant Use as described below in the provisions titled "Significant Use".

GC = Separately metered golf course irrigation quantities from ground water, surface water, reclaimed water or stormwater provided to golf courses inside the service area. The quantities provided may be deducted only if they are included in the permitted quantities for the service area and reported as WD in the Annual Report. The "GC" withdrawal quantities deducted shall not exceed those actually provided, or those that would be permitted for use by the District, whichever is less.

EM = Quantities permitted and used for environmental mitigation as a condition of the water use permit.
New 1-20-09.

C. Compliance Per Capita Water Use.

1. Reclaimed Water or Stormwater Deductions-Some permittees may provide reclaimed water or stormwater to entities that are not customers of their potable water system such that the supply does not reduce the public supply utility permittee's unadjusted gross or adjusted gross per capita rates. For purposes of compliance with the per capita rate of 150 gpd, such permittees may submit a compliance per capita that is defined as:

$$\frac{(WD + IM - EX\text{-}TL\text{-}SU\text{-}GC\text{-}EM\text{-}ST\text{-}RW)}{FP}$$

Where:

WD, IM, EX, TL, SU, GC, EM, and FP are defined as above.

This deduction shall not be taken if the Golf Course (GC) deduction is taken based on reclaimed water or stormwater in calculating an adjusted gross per capita rate.

ST = Separately metered and reported stormwater quantities captured by the permittee that are included in the utility's permitted quantities for uses inside the service area other than for golf course irrigation. The stormwater withdrawal quantities deducted shall not exceed the quantities actually provided, or those that would be permitted for the use by the District, whichever is less. Stormwater quantities deducted as golf course (GC) use above may not be included in this deduction for stormwater. The surface withdrawal points from the stormwater catchments shall be permitted on the provider's water use permit and must be reported as WD in the Annual Report to be deducted. The stormwater deduction shall not be taken where the quality of the ground water source to be permitted or replaced is of lower water quality but is suitable for the intended use, unless the use of the stormwater in such cases reduces adverse impact to the water resources.

RW = 50% of reclaimed water that has received at least secondary treatment and is provided as reclaimed water for a beneficial purpose as set forth in Section 3.1 of this Chapter 3. To be deducted, it must be provided to:

a. any metered use located outside the utility potable service area boundary.

b. any single-site separately-metered use within the utility potable service area boundary that uses 25,000 gpd or more on an annual average basis during the per capita reporting period, except that no deduction shall be taken for quantities used for:

i. residential irrigation (single family, multi-family or mobile home), or

ii. common area irrigation, including entranceways, parking lots, irrigated areas within roadway right-of ways (e.g., road and sidewalk medians), open spaces, community areas, and public parks.

This deduction shall not be taken if the reclaimed water replaces existing demand on the permittee's potable system.

2. Low Persons Per Household Adjustment-After completing the calculations above, if the per capita rate is still greater than 150 gpd and the service area Censuspph is below 2.01 (calculated as PERMPPH in Part D of the Water Use Permit Information Manual), then the applicant may adjust thepph to a value of 2.01. Then, the permittee may adjust the PERMPPH and SEASPPH to 2.01 and recalculate the FP and the compliance per capita.

New 1-20-09.

D. Phase-In Where A Per Capita Rate of 150 gpd is Exceeded as of December 31, 2009.

Existing permittees with a five year compliance per capita rate greater than 150 gpd as of December 31, 2009 shall achieve a compliance per capita rate of 150 gpd as set forth below, or earlier if the permittee deems it feasible. The 2009 five year compliance per capita shall be calculated as the average of Annual Report compliance per capitas for 2009 and the four years prior. In the event that the provisions of this section D. conflict with the provisions of a permit or consent order existing as of January 20, 2009, the terms of the permit or consent order shall supersede this section D. However, a permittee may request a modification of the permit condition or consent order in order to comply with this section D. in lieu of the applicable permit condition or consent order provision.

1. By December 31, 2014, the permittee shall achieve a per capita rate not greater than the midpoint between the five year average compliance per capita rate calculated as of 2009 and 150 gpd.

2. By December 31, 2019, the permittee shall achieve a per capita rate that is not greater than 150 gpd.

3. A permittee that does not achieve a compliance per capita rate that is less than or equal to150 gpd by December 31, 2019, may submit to the District a petition for a variance from the requirement to achieve a per capita rate of 150 gpd.

4. During the phase in period pursuant to this Section D, per capita compliance will be evaluated at year five based on the per capita rate described in paragraph 1, above, and evaluated at year 10 and thereafter based on 150 gpcd.

New 1-20-09.

Significant Use.

Public supply utilities often supply water for non-residential customers. If this non-residential use complies with any of the following criteria (listed A. Through E. below), the use may be termed a significant use by the applicant and be deducted from the utility's gross total water use prior to calculating their Adjusted Gross Per Capita Use. Whether or not any single significant use described in Part A. below is deducted for Adjusted Gross Per Capita calculation, all singleSU must be reported in the Annual Report. Golf course and multi-family residential use (whether classified by the utility as commercial customer or not) do not qualify asSU.

New 1-1-03, Revised 1-20-09.

A. Single Significant Uses.

A single significant use is an I/C facility or other non-residential, non-governmental facility (which may consist of one or more buildings under common ownership, maintenance and management control at a single site or campus) that is supplied with greater than or equal to 25,000 gpd of water on an annual average basis (calculated for a calendar year), or whose water use comprises more than 5% of the utility's annual water use (calculated for a calendar year). Facilities that are not related under common ownership, maintenance and management control shall not be combined to meet a single significant use threshold. For reporting purposes, each single SU shall be identified in the Public Supply Annual Report For General and Individual Permits, Form No. LEG-R.023.00 (09/09), incorporated by reference in Rule 40D-2.091, F.A.C., by customer name and the annual gpd supplied to that customer. If the 25,000 gpd criteria is used for a facility, the 5% criteria may not also be used, and vice-versa.

This significant use deduction can be used in conjunction with the significant use deductions associated with regional government, higher education, and regional health care facilities as described in Parts C. and D. below. All of the water provided to businesses where water itself is the primary ingredient in the product can be added to these deductions. Such businesses are described in E. below.

Exclusions: This single significant use deduction shall not be used if the permittee:

1. Uses the District-Wide Percent I/C Use method described below, or
2. Includes net commuter population estimates in their service area population estimates.

New 1-1-08, Revised 1-20-09, 4-27-10.

B. District-Wide Percent Industrial/Commercial Use.

Utilities with a large number of I/C accounts, which fall below the 25,000 gpd single significant use threshold or the 5% of total utility use threshold may combine these smaller uses and deduct the percent of their I/C use that is greater than the District-wide three-year average percent I/C use which will be available annually from the District. Documentation for this method shall include completion and submittal to the District of the I/C worksheet included in the Public Supply Annual Report for General and Individual Permits, Form No. LEG-R.023 (09/09), incorporated by reference in Rule 40D-2.091, F.A.C. The deduction shall be calculated as follows:

1. Sum the total actual use for these accounts and divide by the total Gross Water Use of Part A of the Public Supply Annual Report (supplied by the District) to determine the utility's percent I/C use.
2. From the Public Supply residential water use tables in the District's three most recently published "Estimated Water Use" reports, add the total for each of the three year's Public Supply District "Gross Use" and add each of the three year's District "I/C Use".
3. Divide the summed "I/C Use" by the summed "Gross Use" to derive the District-wide three-year average percent I/C use (to be referred to as the "District-Wide Percent I/C Use").
4. Compare the permittee's percent I/C Use to the District-Wide Percent I/C Use. If the permittees' percent is equal to or less than the District-Wide Percent I/C Use, no deduction may be taken. If the permittee's percent I/C use is higher, subtract the District-wide Percent I/C Use from the permittee's percent I/C use to find the difference in percentages.
5. Multiply the permittee's Gross Use by the difference in percentages.

Example:

1. A permittee's Gross Use is 5 MGD, and their combined I/C Use is 1.5 MGD. Their percent I/C Use is (1.5 MGD / 5 MGD) = 30%.
2. The sum of all Public Supply permittees' "Gross Use" for 2000, 2001, and 2002, as published in the District's 2000, 2001, and 2002 Estimated Water Use Reports, is 1,218 MGD, and the sum of all Public Supply permittees' "I/C Use" for the same three years is 283 MGD.
3. The District-wide Percent I/C Use is (283 MGD / 1,218 MGD) = 23.2%.
4. The permittee's percent is higher, so 30%-23.2% = 6.8%
5. 6.8 % times 5 MGD = 0.340 MGD.

The permittee may deduct 340,000 gpd from their total gross water use when calculating the adjusted gross per capita water use.

Exclusions: This method of significant use calculation may not be used if the permittee:

1. Uses any other significant use deduction method, or
2. Includes net commuter population in its estimate of service area FP.

New 1-1-03, Revised 1-20-09, 4-27-10.

C. Combined Regional Government and Higher Education Facilities.

Some of the water provided to regional governmental or higher educational facilities (which may consist of one or more buildings under common ownership, maintenance and management) that are located inside the utility's service area but also serve persons who live outside of the utility's service area may be deducted. The name and use for each facility deducted must be provided. The deduction shall be calculated as follows:

1. Add the gpd of water provided to all of these facilities.
2. Using the most recent U.S. Census for the county, determine the percent of the permanent county population not living in the utility's service area.
3. Multiply the percent of county residents who do not live within the utility's service area times the combined use of the facilities. The amount calculated can be deducted.

Note: City parks, recreation centers, public and private K-through-12 schools, city or town governmental facilities, local vocational-technological schools and other facilities which generally only serve the service area population shall be excluded. However, water use for K-through12 schools, that do not serve any of the service area population may be deducted by the applicant. The following are examples of facilities for which the water provided may be partially deducted:

a. Community colleges, colleges and universities (public or private), and
b. County, state, and federal regional administrative and maintenance facilities.

Exclusions: The water use of these facilities may not be deducted under the provisions of this section if the permittee:

1. Uses the District-Wide Percent I/C Use method, or
2. Includes net commuter population estimates in service area population estimates.

New 1-1-03, Revised 1-20-09.

D. Individual Regional Health Facilities.

Some of the water provided to health care facilities such as regional hospitals or specialty clinics (which may consist of one or more buildings at a single site or campus under common ownership, maintenance and management) that are inside the utility's service area but also serve persons living outside the utility service area boundaries may be deducted. The allowable deduction is calculated individually for each health care facility. It is the ratio of annual admissions with patient zip codes outside the service area to the total number of annual admissions times the water provided to the health care facility. The name and water use for each facility must be provided.

Exclusions: The water use of these facilities may not be deducted as an individual significant use under the provisions of this section if the permittee:

1. Uses the District-Wide Percent I/C Use method.
2. Includes commuter population estimates in service area population estimates.

E. Individual Industrial/Commercial Facilities Where Water is the Primary Ingredient of the Final Product.

Individual facilities such as brewers, soft-drink bottlers, and juice reconstitution plants (which may consist of one or more buildings at a single site or campus under common ownership, maintenance and management) where water is the primary ingredient of the final product may deduct 100% of the water in the product.

The permittee may choose to also take single significant use deductions described in A. above or use commuter population in its estimate of the FP, but not both.

Exclusions: The water use of such facilities cannot be deducted if the permittee uses the District-Wide Percent I/C Use method.

1-1-03, Revised 1-1-07, 1-20-09

ANNUAL REPORTS.

By October 1 of each year, Public Supply permittees shall submit to the District the following, current as of October 1:

1. Description of the current water rate structure (rate ordinance or tariff sheet) for potable and non-potable water.
2. Description of the current customer billing and meter reading practices and any proposed changes to these practices.

New 4-27-10, Amended 12-12-11.

Public Supply Annual Report For Permits For 100,000 gpd Or Greater.

The Public Supply Annual Report for permits for 100,000 gpd or greater shall be submitted annually by April 1 and shall consist of the following components described in A.-G., below. Permittees that have interconnected service areas shall provide the information for the entirety of the interconnected system even if the water supply for the system is provided from multiple permits or is imported. New 4-27-10, Amended 12-12-11.

A. Per Capita Use Rate.

The per capita use rate shall be calculated as set forth in the section of this Chapter entitled, "PER CAPITA DAILY WATER USE" and in accordance with the directives included in the section of this Chapter entitled, "DOCUMENTATION OF PER CAPITA DAILY WATER USE CALCULATION FOR THE WATER USE ANNUAL REPORT" below. If a compliance per capita rate of 150 gpd or less is not achieved the permittee shall comply with the requirements in the section entitled Reporting and Compliance With Per Capita Daily Water Use, below.
New 4-27-10.

B. Residential Use.

Residential water use consists of the indoor and outdoor water uses associated with each category of residential customer (single family units, multi-family units, and mobile homes), including irrigation uses, whether separately metered or not. The permittee shall document the methodology used to determine the number of dwelling units by type and their quantities used. Estimates of water use based upon meter size may be inaccurate and will not be accepted. If mobile homes are included in the permittee's multi-family unit category, the information for them does not have to be separated. The information for each category shall include all of the following:

1. Number of dwelling units per category.
2. Number of domestic metered connections per category.
3. Number of metered irrigation connections.
4. Annual average quantities in gallons per day provided to each category.
5. Percentage of the total residential water use provided apportioned to each category.

New 4-27-10.

C. Non-Residential Use.

Non-residential use consists of all quantities provided for use in a community not directly associated with places of residence. For each category below, the permittee shall include annual average gpd provided and percent of total non-residential use quantities provided. For each category 1. Through 6. below, the number of metered connections shall be provided. These non-residential use categories are:

1. IC uses, including associated lawn and landscape irrigation use.
2. Agricultural uses (e.g., irrigation for a nursery).
3. Recreation/Aesthetic Uses, excluding golf course irrigation (e.g., irrigation of Common Areas, stadiums and school yards).
4. Golf course irrigation.
5. Fire fighting, system testing and other accounted uses.
6. Water loss as defined in the section entitled "DEMAND", above.

New 4-27-10.

D. Conservation.

The conservation portion of the Public Supply Annual Report For General and Individual Permits shall consist of the following:

1. Description of any ongoing audit program of the water treatment plant and water distribution systems to address reductions in water losses. If the current water loss rate, as determined in Part B of the Public Supply Water Use Annual Report, is greater than 10% of the total distribution quantities, a water audit as described in this Section 3.6 (below) shall be conducted, and the results shall be submitted by the following October 1.
2. An update of the water conservation plan that describes and quantifies the effectiveness of measures currently in practice, any additional measures proposed to be implemented, the scheduled implementation dates, and an estimate of anticipated water savings for each additional measure.

3. A description of the permittee's implementation of water-efficient landscape and irrigation codes or ordinances, public information and education programs, water conservation incentive programs, and which measures and programs, if any, were derived from the Conserve Florida Water Conservation Guide and provide the projected costs of the measures and programs and the projected water savings.
New 4-27-10.

E. Alternative Water Supplied Other Than Reclaimed Water.

Permittees that provide AWS other than reclaimed water (e.g., stormwater not treated for potable use) shall include the following:

1. Description of the type of AWS provided.
2. County where service is provided.
3. Customer name and contact information.
4. Customer's Water Use Permit number (if any).
5. Customer's meter location connection latitude and longitude.
6. Meter ownership information.
7. General customer use category.
8. Proposed and actual flows in annual average gpd per customer.
9. Customer cost per 1,000 gallons or flat rate information.
10. Delivery mode (e.g., pressurized or non-pressurized).
11. Interruptible Service Agreement (Y/N).
12. Month/year service began.
13. Totals of monthly quantities supplied.
14. A map depicting the area of alternative water use service. This map should include any areas projected to be added within the next year.

New 4-27-10.

F. Suppliers of Reclaimed Water.

This section F. does not apply to permittees that have a wastewater treatment facility with an annual average design capacity equal to or greater than 100,000 gpd. Instead, those permittees shall submit the SWFWMD Annual Reclaimed Water Supplier Report," described in Section 3.1 above under the subheading "Reclaimed Water Supplier Report."

Permittees that have a wastewater treatment facility with an annual average design capacity less than 100,000 gpd shall have the option to submit the following information as a component of the Annual Report, or to complete the "SWFWMD Annual Reclaimed Water Supplier Report," described in Section 3.1 above under the subheading "Reclaimed Water Supplier Report." Those that opt to complete this Part F of the Annual Report shall include all of the following information:

1. Bulk customer information:
    a. Name, address, telephone number.
    b. WUP number (if any).
    c. General use category (residential, commercial, recreational, agricultural irrigation, mining).
    d. Month/year first served.
    e. Line size.
    f. Meter information.
    g. Delivery mode (pressurized or non-pressurized).
2. Monthly flow in gallons per bulk customer.
3. Total gpd provided for metered residential irrigation.
4. Disposal information:
    a. Site name and location(latitude and longitude or as a reference to the service area map).
    b. Contact name and telephone.
    c. Disposal method.
    d. Annual average gpd disposed.

G. Updated Service Area Map.

If there have been changes to the service area since the previous reporting period, the permittee shall update the service area using the map that is maintained in the District's Mapping and GIS system.
SWFWMD Annual Reclaimed Water Supplier Report

Public Supply Water Use Annual Report For Permits Less than 100,000 gpd.

All public supply permittees with a permit for less than 100,000 gpd shall submit the following information, as previously defined in the section entitled "PER CAPITA DAILY WATER USE", using the form Public Supply Annual Report General Water Use Permit For Less Than 100,000 GPD Annual Average Quantities, Form No. LEG-R.047.00 (07/09) incorporated by reference in subsection 40D-2.091(2), F.A.C., covering the preceding calendar year.

1. Ground water, surface water and stormwater WD.
2. Water imported/purchased from other supplier(s) (IM).
3. Water exported/sold to other supplier(s) (EX).
4. Treatment loss (typically R/O or sand filtration) (TL).
5. Functional population (FP). FP is the served permanent population as adjusted by the seasonal resident, tourist, group quarters and net commuter population within a utility's service area as determined in accordance with "Requirements for the Estimation of Permanent and Temporal Service Area Populations," dated January 20, 2009, as set forth in Part D of the Water Use Permit Information Manual, incorporated herein by reference. See the paragraph titled "SERVICE AREA FUNCTIONAL POPULATION ESTIMATES" for further information.
6. Per capita use rate calculated as set forth in the section of this Chapter entitled, "PER CAPITA DAILY WATER USE" and in accordance with the directives included in the section of this Chapter entitled, "DOCUMENTATION OF PER CAPITA DAILY WATER USE CALCULATION FOR THE WATER USE ANNUAL REPORT" below.
7. Any changes to the service area since the previous reporting period, using the map that is maintained in the District's Mapping and GIS system.

New 4-27-10, Amended 12-12-11.

SWFWMD Annual Reclaimed Water Supplier Report.

Permittees that have a wastewater treatment facility with an annual average design capacity for 100,000 gpd or more shall submit the SWFWMD Annual Reclaimed Water Supplier Report, described in Section 3.1 above under the subheading Reclaimed Water Suppliers for a fiscal year (October 1 to September 30) on or before April 1 of the following year. A map depicting the area of reclaimed water service that includes any areas projected to be added within the next year, shall be submitted with this report. Public supply utility permittees without a withdrawal point as of April 27, 2010, within the SWUCA, or within the NTB WUCA, as it existed prior to October 1, 2007, shall have until April 1, 2009, to begin submitting these annual reports.

New 4-27-10, Amended 12-12-11.

DOCUMENTATION OF PER CAPITA DAILY WATER USE CALCULATIONS FOR THE ANNUAL REPORT.

Those quantities included in the calculation of unadjusted gross, adjusted gross and compliance per capita daily water use described above shall be documented and reported as set forth below by the permittee for the reporting period included in its permit.

WD (Withdrawals) – Documentation shall consist of pumpage records in annual average gpd as metered at the well head(s), wellfield departure point, surface water intake facility, stormwater facility or reclaimed water lines. The pumpage records shall be totalized for a total withdrawal quantity for the reporting period.

IM (Imported Water) – Documentation shall consist of a summary report of the water purchased or otherwise obtained in bulk from another utility for potable use in the service area in annual average gpd, and the supplier's WUP number(s), or consumptive use permit number if the supplier is in another water management district. Quantities shall be determined at the departure point from the supplier's service area. Irrigation water imported into the service area from another utility must be documented separately according to the use type (for example, commercial, residential, recreational/aesthetic).

EX (Exported Water) – Documentation shall consist of annual average gpd transferred in bulk quantities to another utility, and the recipients's WUP number(s), or consumptive use permit number if the recipient is in another water management district. Quantities shall be determined at the departure point from the exporting permittee's service area. Water supplied to wholesale public supply customers that are not required to obtain a Wholesale Public Supply Water Use Permit that are included in this category shall be identified by customer name and quantity.

TL (Treatment Losses) – Documentation shall consist of the annual average gpd lost in routine treatment for potability. Examples of treatment losses types are desalination reject, membrane cleaning and sand filtration

backwash. Treatment losses are calculated as raw water into the plant minus treated water out of the plant. In addition, no more than 1% of treated water volume delivered to the distribution system for flushing distribution lines for potability may be deducted. Treated water volume delivered to the distribution system includes water from withdrawals plus imports, minus exports, minus treatment losses. Treatment loss and line flushing quantities shall be separately calculated and documented.

FP (Functional Population) – Documentation of the calculation of FPs shall include Worksheets A through I (given in Appendix C of Part D of the Water Use Permit Information Manual), as applicable, and supporting documentation for survey data used in accordance with Part D. Permittees adjusting FP based on lowpph shall submit two sets of required population estimation spreadsheets A through I, set forth in Part D. of the Water Use Permit Information Manual, as applicable, one set to document FP using PERMPPH and the other set to document the FP using 2.01. Served dwelling unit counts shall be calculated by adding the number of units served in January and December and dividing by two (2) for a reporting period of a calendar year. Those permittees that choose not to, prior to being required to, report a FP pursuant Part D of the Water Use Permit Information Manual as provided in the subsection below titled "Service Area Functional Population Estimates-For Current Year, Year of Interest And Annual Reports" shall document in the Annual Report the method and data used to calculate the population served within the permittee's service area that is reported in the Annual Report. The data and methodology for calculating the FP numbers supplied in the Annual Report shall be included with the Annual Report.

SU (Significant Uses) – Whether or not a Single Significant Use described in A. below is deducted, all must be reported with documentation of quantities provided, identity of the recipient, and identification of the type of use (A through E below). ForSU that are deducted, the documentation shall include as follows:

A. Single Significant Uses.

1. Single uses for which 25,000 gpd or more is provided:
    a. the type of IC use.
    b. the customer's name and mailing address.
    c. the customer's contact person's name, email address and telephone number.
    d. annual average daily quantities provided.
    e. supporting meter readings or bills.
    f. a conservation plan that describes the permittee's specific water conservation programs for that significant user.
    g. a water audit that documents the type(s) of water uses that occur within the significant user's facility, quantities used per type, leak detection and other water conservation activities undertaken by the user.
2. Single water uses that each comprise more than 5% of the utility's calendar annual use
    a. the type of IC use.
    b. the customer's name and mailing address.
    c. the customer's contact person's name, email address and telephone number.
    d. annual average daily quantities provided.
    e. supporting meter readings or bills.
    f. a conservation plan that describes the permittee's specific water conservation programs for that significant user.
    g. a water audit that documents the type(s) of water uses that occur within the significant user's facility, quantities used per type, leak detection and other water conservation activities undertaken by the user.

B. District-Wide Percent Industrial/Commercial Use.

Documentation shall include, by meter size, the number of I/C connections and use in average gpd, the total unadjusted gross use (gpd) and the District three-year average I/C % used. A water conservation plan specific to each business type deducted (e.g., offices, restaurants, retail/wholesale, etc.) shall be provided in lieu of a water conservation plan for each individual I/C customer.

C. Combined Regional Government and Higher Education Facilities

Documentation shall include for each facility included in the deduction calculation, the facility name, the facility's contact person's name, email address and telephone number, quantity provided in gpd and, from the most recent Census, the percent of the county total population not living in the utility service area. A water conservation plan specific to each group type (regional government and or qualifying education facilities) shall be provided in lieu of a water conservation plan for each individual customer deducted.

D. Individual Regional Health Facilities.

Documentation shall include for each facility included in the deduction:

a. the name of the facility.

b. the facility's contact person's name, email address and telephone number.

c. the types of water use and the gpd provided for each type of use.

d. the total number of patients during the reporting period.

e. the number of patients with postal zip codes outside the service are.

f. a conservation plan that describes the permittee's specific water conservation programs for that significant user.

g. a water audit that documents the type(s) of water uses that occur within the significant user's facility, quantities used per type, leak detection and other water conservation activities undertaken by the user.

E. Individual Industrial/Commercial Facilities Where Water Is the Primary Ingredient of the Product.

Documentation shall include all of the following information for each facility:

a. the name of the facility.

b. the type of facility.

c. the facility's contact person's name, email address and telephone number.

d. the average gpd provided during the reporting period.

e. the percent of the final product that is water.

f. a conservation plan that describes the permittee's specific water conservation programs for that significant user.

g. a water audit that documents the type(s) of water uses that occur within the significant user's facility, quantities used per type, leak detection and other water conservation activities undertaken by the user.

GC (Golf Courses) – Documentation shall include a report on the permitted and separately metered quantities from ground water, surface water, reclaimed and stormwater sources used for golf course irrigation. To deduct these quantities, the quantities must be authorized for golf course irrigation in the permit for which per capita is being calculated.

EM (Environmental Mitigation) – Documentation shall include a report on the permitted and used quantities for the reporting period in gpd for environmental mitigation as required by the permit for which per capita is being calculated.

ST (Stormwater) – Documentation shall include a report on the separately metered stormwater quantities generated and used in the service area that are included in the utility's permit for the service area for uses other than golf course irrigation. If the stormwater quantities are not reported as WD, they may not be deducted. The report shall include the number of connections by use type (e.g., residential, commercial, recreation aesthetic, etc.)

RW (Reclaimed Water Credit) – Documentation shall include a report on separately metered reclaimed water quantities generated by:

a. Name of the customer.

b. Account number.

c. Customer service address.

d. Quantities provided during the reporting period in average gpd.

e. Claimed deduction during the reporting period in average gpd.

f. Meter size.

g. Whether the use is inside or outside of the potable service area boundary.

h. Description of the use (may not include residential or common area irrigation as described in the provisions titled Per Capita Daily Water Use, above).

New 1-20-09, Amended 12-12-11.

SERVICE AREA FUNCTIONAL POPULATION ESTIMATES – FOR CURRENT YEAR, YEAR OF INTEREST AND ANNUAL REPORTS.

Permittees required to submit service area FP estimates shall estimate permanent resident, temporal resident, and group quarter populations. Service area tourist and net commuter population may be estimated as well. All estimates must be prepared in accordance with "Requirements for the Estimation of Permanent and Temporal Service Area Populations," dated January 1, 2007, as set forth in Part D of the Basis of Review For Water Use Permit Applications. Public supply permittees whose permit requires the submittal of pumpage data shall submit the applicable Worksheets from Part D and supporting documentation for calculations of per capita rates utilizing this

standardized methodology beginning two years from January 1, 2007. For those permittees with no withdrawals in the SWUCA as of January 20, 2009, this date shall be beginning two years from January 20, 2009.
1-1-07, Revised 1-20-09.

INTERCONNECTED WATER SUPPLY SYSTEMS.

Applicants with interconnected systems may be required to determine supply versus demand based on the needs and sources of the entire system. Interconnected systems are water supply systems such as regional water supply authorities and member governments, as well as individual water supply entities with multiple wellfields or other water sources. The applicant must separately identify each area and source of supply. This analysis includes a list of projected average and peak demand for the entire area supplied, a list of permitted and proposed quantities for all sources of supply, and any supply short-falls determined based on safe yield, for the period associated with the application at hand. An example of this analysis is presented below:

Year: 1995. Quantities in MGD, Average Annual/Peak Month					
Water Sources	**Permitted Quantities**	**Projected Demand**	**Safe Yield**	**Safe Yield Balance**	**Permitted Q Balance**
Wellfield A	30/40	30/40	30/35	0/-5	0/0
Wellfield B	10/15	10/15	8/12	-1/-3	0/0
Reservoir A	35/45	45/55	35/45	0/0	-10/-10
Proposed Source	20/40	10/30	40/60	+20/+20	+10/+10
Totals	95/140	95/140	103/142	+18/+12	0/0

In this example, the existing permitted sources show a deficit in safe yield by the year 1995 of 2 MGD on an Average Annual basis and 8 MGD on a Peak Month basis, as well as a deficit in permitted quantities of 10 MGD for both the Average and Peak Month. The proposed source shows a demand of 10 MGD Average and 30 MGD Peak Month, which, combined with the system deficit of 10 MGD average and 10 MGD Peak Month, results in proposed permitted quantities of 20 MGD Average and 40 MGD Peak Month. If permitted, this proposed source would satisfy system-wide demands as well as the safe yield deficit.

This type of information will be used to analyze the total demands of the entire interconnected service area in relation to the availability of the supply sources and permitted quantities. This analysis is useful to analyze the needs and sources of each demand area/supply source individually and the interrelationships among all users and sources.

WATER AUDITS.

If the Public Supply Water Use Annual Report reflects that greater than 10% of the total water plant output minus all accounted uses is water loss (see DEMAND above in this Section 3.6), the permittee must complete a water audit by the following July 1, and the results shall be submitted by October 1 of the same year. The water audit report shall (1) evaluate the items set forth in Secton 3.6 Public Supply, Demand, as possible sources for the water losses, and (2) include a schedule for a remedial actions plan to reduce the water losses to below 10%.
102-03, Revised 1-20-09, 4-27-10.

EXEMPTIONS FROM WATER CONSERVATION REQUIREMENTS.

Permittees with a Small General Waer Use Permit are exempted from the Annual Report, water conserving rate structure, customer billing and meter reading criteria, and water audit requirements.
1-1-03, Revised 1-20-09, 4-27-10.

3.7 RECREATION OR AESTHETIC.

Applicants for recreation and aesthetic use including, but not limited to water parks, theme parks, aquariums, zoos, and attractions, and irrigation requirements for golf courses, cemeteries, sports fields, stadiums, arenas, lawn and landscape areas and Common Areas must demonstrate that the quantities applied for are reasonable quantities for the activity and use. This demonstration is typically accomplished by providing information on:

1. The population to be served.
2. The type and amount of turf and plants to be irrigated.
3. The timing and the method of irrigation used.
4. The scheduled draining, filling and augmentation of ponds, pools, flumes, and aquatic habitats.

5. Animal needs.
6. Other specific water uses.

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

1. Personal/sanitary use – water 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. Irrigation use – water for the irrigation of lawns and landscapes, intensive recreational areas such as golf courses, 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 plant requirements and applicable efficiency requirements of the area. If exotic or high-value plants having special irrigation needs not met by the standard efficiency requirements are irrigated, separate documentation of such needs should be submitted.
3. Animal use – water for the watering and washing of animals. This use may also include the augmentation and other water requirements of aquatic habitats, where applicable. If the water needs of a particular or comparable type of animal are not addressed in Table 3-2, the Applicant may submit documented requirements.
4. Water-based recreation use – 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.
5. Other specific use – all other use not included in items 1. Through 4. above

Revised 4-27-10.

CONSERVATION REQUIREMENTS.

Permits for 100,000 gpd or Greater.

New Applicants.

Applicants for new permits for 100,000 gpd or greater for recreation or aesthetic uses shall submit a water conservation plan that insures efficiency of use and provides for increasing efficiency of use by implementing environmentally, technically and economically feasible water conservation practices applicable to the activity. At a minimum, the applicant shall include a description of how each water conservation practice listed below is addressed and indicate those that will be implemented (include an implementation schedule) those that are not applicable for the activity, or those that are not environmentally, technically or economically feasible (include documentation of infeasibility). The plan shall include a description of each water conservation practice and its expected implementation date. Progress reports shall be due based on the implementation schedule.

1-1-03, Revised 12-30-08, 4-27-10.

Existing Permittees.

In addition to the conservation plan requirements for new applicants, above, all applicants to renew or to modify (except applicants for Letter Modifications) existing permits for 100,000 gpd or greater for recreation or aesthetic use shall include in the plan a report on the water conservation practices not listed below that have been implemented. The report shall describe how each water conservation practice has been implemented.

Water Conservation Practices for Recreation or Aesthetic Uses.

1. Conduct an ongoing analysis of the irrigation system efficiency, including conveyance, distribution, and application, and if storage ponds or reservoirs are used, an analysis of storage efficiencies. The analysis shall include periodic testing for application and distribution uniformity, and system maintenance to irrigate efficiently.
2. Avoid daytime irrigation, aeration or other activities which involve spraying water into the air to the greatest extent practicable to minimize water losses from evaporation and the wind. This does not apply to daytime use of water for system maintenance or other necessary non-irrigation uses.
3. Conduct an ongoing maintenance and repair program on the water distribution and irrigation systems, including a system-wide survey conducted at least once per year that includes monitoring flow rates and system pressures to detect leaks and clogs; routine cleaning system components (nozzles, valves, filters, meters, etc.); checking controllers or timers for accurate operation; and monitoring meters for unusually high or low readings.
4. Evaluate the feasibility of improving the efficiency of the current water distribution and irrigation system, converting to a more efficient system, or installing stormwater ponds to provide an alternative water supply source. Implement the improvements, conversion, and/or installation when it is determined to be operationally and economically feasible.

5. Implement an irrigation schedule that maximizes the efficiency of delivering the correct quantity of water to the root zone at the time it is needed. This includes varying the irrigation schedule (time and duration) to accommodate rainy and dry seasons, adjustments for rainy versus dry and normal rainfall years, use of rain sensors, and reducing irrigation during dormant months.

6. Monitor ambient conditions and soil profile using appropriate tools to determine when and how much irrigation water is needed. Examples of these tools include soil moisture sensors, weather stations or other climatic measuring devices, and piezometers to monitor the water table elevation.

7. Use of frequent mowing practices to keep turf at an optimum constant height to provide a dense canopy to retain soil moisture by shading.

8. Reduce or eliminate irrigation runoff by monitoring irrigation duration so that only the water necessary for plant growth is used and avoiding irrigation of paved areas.

9. Use of Florida-friendly landscape principles and components consistent with Section 373.185, F.S. Consistency with Section 373.185, F.S., may be demonstrated by adoption by ordinances or covenants, or implementation, as applicable, of the FDEP's Landscape Guidance: Models for Ordinances, Covenants, and Restrictions, 1/09, developed pursuant to Section 373.185, F.S., as may be updated from time to time, and this District's supplements thereto.

10. Applicants for residential irrigation where potable supply for the development is supplied by another permittee, the following conservation plan requirements are in addition to those above:

(a) minimization of lawn and landscape irrigation with supplies other than reclaimed water.

(b) use of microirrigation on planting beds and other non-turf areas where irrigation is required, and minimize the acreage of irrigated lawn area.

(c) properly installed, and maintained and operational rain or soil moisture sensor shutoff devices or an evapotranspiration controller plus rain sensors and an active data subscription. Irrigation systems shall be properly maintained and incorporate the standards set forth in the Landscape Irrigation and Florida Friendly Design Standards, dated December 2006, developed pursuant to Section 373.228(4), F.S., and incorporated herein by reference. The Standards are available upon request from the District and at www.dep.state.fl.us.

(d) deed restrictions or covenants shall not:

1. require a certain percentage of lots, if applicable, or other areas, to be turfgrass.
2. require specific types of turfgrasses to be utilized.
3. require lawns, if applicable, or other areas, to be maintained at a specific color, and shall not prohibit browning during periods of dormancy or drought.
4. require resodding of turf during drought periods.

(e) for irrigation quantities that are supplied via a conveyance system that is separate from the indoor potable supply, individual use metering and a water conserving rate structure for irrigation quantities.

11. Use of AWS for irrigation.

New 4-27-10.

Small General Water Use Permits.

All applicants for Small General Water Use Permits for recreation or aesthetic use shall agree to implement all water conservation measures that are economically, technically, and environmentally feasible, including:

1. Limiting daytime irrigation to the greatest extent practicable to reduce water losses.

2. Implementation of a leak detection and repair program as part of an ongoing system maintenance program. This program shall include a system-wide inspection at least once per season.

3. Evaluation of the feasibility of improving the efficiency of the current water distribution and irrigation system or converting to a more efficient system. This includes implementation of the improvement(s) or conversion when determined to be operationally and economically feasible.

4. Implementation of an irrigation schedule that maximizes the efficiency of delivering the correct quantity of water to the root zone at the time it is needed. This practice shall include the use of tools to determine when and how much irrigation water is needed. Examples of these tools include soil moisture sensors, weather/climatic measuring devices, or piezometers to monitor the water table elevation.

New 4-27-10.

COMMON AREAS DEVELOPED BY NON-GOVERNMENTAL ENTITIES.

Non-governmental applicants for a General or Individual Water Use Permit for water supply for a residential development shall identify existing and proposed acreage of Common Areas on the application and demonstrate the following:

1. AWS shall be used to the maximum extent that is technically, environmentally and economically feasible to irrigate Common Areas.

2. Irrigation of Common Areas is, or will be, minimized through minimization of the acreage to be irrigated and the use of vegetation that requires minimal supplemental irrigation, where practical.

3. The local government responsible for the issuance of building permits for the project has adopted an ordinance incorporating the principles of Florida-friendly landscaping; or, the applicant will implement Florida-friendly landscaping consistent with Section 373.185, F.S. The applicant may demonstrate consistency with Section 373.185, F.S., by establishing that the applicant has implemented, or commits to implement, or that the applicable local government has adopted the FDEP's Landscape Guidance: Models for Ordinances, Covenants, and Restrictions, 1/09, developed pursuant to Section 373.185, F.S., which is incorporated by reference.

4. Irrigation systems are limited to high efficiency systems with properly installed, maintained and operational rain or soil moisture sensor shutoff devices, or evapotranspiration controller with a rainfall shutoff device and an active data subscription as applicable. Irrigation systems shall be properly maintained and incorporate the standards set forth in the Landscape Irrigation and Florida Friendly Design Standards, dated December 2006, developed pursuant to Section 373.228(4), F.S., and incorporated herein by reference. The Standards are available upon request from the District and at www.dep.state.fl.us.

New 4-27-10.

GOLF COURSE CONSERVATION-ADDITIONAL REQUIREMENTS.

Irrigation of Roughs.

Roughs are areas outside of the designated play area (fairway, tees, greens). Since January 1, 2006, quantities have not been allocated for irrigation of roughs for golf courses with withdrawal points in a WUCA. Quantities will not be allocated for irrigation of roughs for all other golf courses by January 1, 2012. However, in all areas, the permittee may irrigate roughs using quantities permitted for the tees, greens, and fairways. The amount of permitted ground or surface water plus alternative water supply applied to the entire golf course shall not exceed reasonable-beneficial quantities for tees, greens and fairways alone. An applicant may request prior approval from the District to use roughs as wet weather reclaimed water disposal sites.

1-1-03, Revised 1-1-07, 4-27-10.

Conservation Plans.

In addition to the Water Conservation Practices For Recreation or Aesthetic Uses listed above, applicants for new, renewal of or to modify to increase quantities (except for applicants of Letter Modifications) on General or Individual Water Use Permits for golf course irrigation shall address the following items in their water conservation plan:

1. Conversion to an irrigation system that utilizes a low application rate (30 gallons per hour or less) for non-turf areas.

2. Limiting frequent irrigation to water-critical areas, and limiting irrigation of other areas.

3. Reduction of irrigated areas, such as reducing the size of landing areas.

Progress reports shall be due based on the implementation schedule for these practices.

1-1-03, Revised 1-1-07, 12-30-08, 4-27-10.

The District publishes a document titled Golf Course Conservation Guidelines which may be consulted in order to prepare the conservation plan required by this provision. The Guidelines are available from the District upon request.

1-1-03, Revised 4-27-10.

REPORTING REQUIREMENTS FOR RECREATION OR AESTHETIC IRRIGATION WATER USE WITHIN THE SWUCA.

To ensure compliance with the total allocated acre-inches per acre per season per crop or plant and the assigned efficiency standards, the District requires the following data to be submitted by all Individual or General Water Use permittees.

Irrigation Water Use Report.

The following information shall be reported on the Irrigation Water Use Form-Annual Recreation/Aesthetic/Golf, SWUCA, Form No. LEG-R.018.01 (4/09) incorporated by reference in paragraph 40D-2.091(2)(c), F.A.C., for all recreational and aesthetic irrigation (examples: golf course turf, sports field turf, lawn and landscape in parks, playgrounds, theme parks, etc.):

1. Irrigated plant type (golf course turf, lawn and landscape, sports field);
2. Total acres per plant type;
3. Acres shrubs and/or trees.
4. Number of acres of tees and greens.
5. The dominant soil type or acres by dominant soil type.

A copy of the form can be obtained from the District's website at www.watermatters.org or District offices. New 12-30-08, Revised 8-30-09.

APPENDIX A
ANNUAL RECLAIMED WATER SUPPLIER REPORT
INSTRUCTIONS AND DEFINITIONS

The District is committed to optimizing the efficient use of reclaimed water throughout its 16-county region. Development and maintenance of a thorough monitoring program of its reclaimed water distribution network and customer's end use enables public water supply permittees to track and maximize the reasonable-beneficial use of this resource.

The enclosed excel spreadsheet is provided to assist the permittee in meeting reclaimed water reporting requirements of the Annual Reclaimed Water Supplier Report required in Chapter 3 of Part B, Basis of Review, of the Water Use Permit Information Manual. Entries are intended to be line-item.

Page 1 of the spreadsheet is designed to allow the permittee to complete one form for multiple annual reporting requirements for the District as well as for the FDEP. Use of a common format can serve as a valuable worksheet for preparing the FDEP report while assuring that data submitted to FDEP corresponds to data provided to the District. In addition to District reporting requirements, the information requested in the spreadsheet covers the majority of data necessary for the reporting requirements associated with the following:

1. FDEP Annual Reuse Report.
2. FDEP Water Protection Sustainability Trust Fund, and
3. SWFWMD Cooperative Funding Initiative Agreement Special Conditions contained in Exhibit A

The list of items below (as well as each column in the excel spreadsheet) is annotated to indicate the report for which the information is required:

1. Required: Required for the SWFWMD Annual Reclaimed Water Supplier Report.
2. Optional: Not required for any of the reports but helpful to the District in alternative source planning programs, the SWFWMD regulatory report, and not required if not pertinent to the wastewater treatment facility or customer under Cooperative Funding.
3. CF Required: Contractually required for Cooperatively Funded Projects.
4. FDEP Required: Required as a component of the FDEP Annual Reuse Report or FDEP Water Protection Sustainability Trust Fund.

The reporting period of October 1 to the following September 30 is changed to coincide with the reporting period for the Annual FDEP Reuse Report. However, the due date for submittal to the District remains April 1 even though the FDEP due date remains December 31st each year.

Explanations and definitions for each of the various data elements (given as column headings) comprising this report are given below as well as briefly when your click in cells below the column headings. The input FORMAT or DOMAIN CODES are given after the explanation below. Text is case-sensitive and dropdowns are available for DOMAIN CODES.

Page 2 of the spreadsheet is formatted for input of monthly deliveries of reclaimed water (total gallons per month) to bulk customers or to categories of reclaimed water use.

PAGE 1

Column 1 – Water Year

Required

The water year (October 1 – September 30) for this report. For example, the period of time for October 1, 2008 – September 2009 is water year 2009.

FORMAT = yyyy

Column 2 – County

Required

The county in which the utility provides reclaimed water for the named customers. If more than one county is supplied, enter the amounts supplied for each county separately.

DOMAIN CODES: Charlotte, Citrus, Desoto, Hardee, Hernando, Highlands, Hillsborough, Lake, Levy, Manatee, Marion, Pasco, Pinellas, Polk, Sarasota, Sumter. (Dropdown available.)

Column 3 – Permittee – Wastewater Treatment Plant

Required

The name of the utility as it appears on its Water Use Permit and the name of the wastewater treatment plant if different from that of the utility.

FORMAT: 24 text characters.

Column 4 – Permittee Water Use Permit (WUP) Number

Required

The SWFWMD water use permit number or numbers issued to the utility. Typically, the permittee will be the potable water utility.
FORMAT: 12 digit number. For instance, 20012345.006.
Column 5 – Bulk Customer Name
Required
The name of the individual customer receiving reclaimed water (golf course, hospital, commercial facility, industrial plant, etc.). Residential customers can be categorized according to any distinct areas on the utilities reclaimed system (e.g., NE Service Area, etc.). Disposal and Natural System Restoration projects do not have to have a name.
FORMAT: 25 – text characters.
Column 6 – Customer Category or Use for Reclaimed Water
Required
Identify the customer category or general intended use of the reclaimed water as follows:

- RES-residential irrigation.
- AGR-agricultural irrigation.
- IND-industrial/commercial process use.
- RAC-recreation, aesthetic, and commercial irrigation.
- GC-golf course irrigation.
- NSR – natural systems restoration.
- SPRAY – sprayfield disposal
- RIB – Rapid Infiltration Basin disposal
- SWD – Surface Water Disposal
- DWD – Deep Well Disposal
- ASR – Aquifer Storage (not used this year)
- RSV – Reservoir Stored (not used this year)

DOMAIN CODES: RES, AGR, IND, RAC, GC, NSR, SPRAY, RIB, SWD, DWD, ASR, RSV (Dropdown available.)
Column 7 – Customer WUP Number
Required
The SWFWMD water use permit number issued to this customer for withdrawal of water from a traditional source of water that will be replaced with reclaimed water. If the customer's WUP number is 20012345.001, input 2012345. Input "None" if the customer does not have a WUP.
FORMAT: 10 digit number with 3 digit extension after the decimal.
Column 8 – Customer WUP – First Issue Date
Optional
The year the District first issued the customer the water use permit input in the previous column. Leave blank, if the customer does not have a WUP.
FORMAT: yyyy (valid range 1970-2010).
Columns 9 & 10 – Customer Location – Latitude/Longitude
Required
Data entry in these two columns define the single point of latitude and longitude for the interconnect between the utility's transmission main and the customer's reclaimed water system. Input degrees-minutes-seconds
FORMAT: 9–digit number. Format = ##*##'##"
Column 11 – Section, Township, Range
Required
Section, Township, Range where ~~of~~ the customer's interconnection is located.
FORMAT: ## – ##S – ##E
Column 12 – Meter
Optional
"Yes" or "No" entry if the utility has installed a reclaimed water meter at a facility having a water use permit.
NOTE: Subdivisions are not included unless they are a community development corporation with a water use permit.
DOMAIN CODES: Yes, No (Dropdown available.)
Column 13 – Meter Size
Optional
Meter size determines peak flow rate, or upper limit of water use in gpm. Enter meter size (or use dropdown) in inches. If no meter, leave blank. 6 characters maximum.

DOMAIN CODES: 3/4", 5/8", 1", 1-1/2", 2", 3", 4", 5", 6", 7", 8", 9", 10", 11", 12", etc. (Dropdown available.)
Column 14 – Meter Type
Optional
The type of flow meter the utility has installed at the customer's location. Acceptable entries are "D" for digital flow meters or "A" for analog flow meters.
DOMAIN CODES: D, A, None (Dropdown available.)
Column 15 – Meter Serial Number
Optional
The serial number for the flow meter installed by the utility at the customer's location. Please leave blank if there is no meter.
FORMAT: 12–digit number.
Column 16 – SWFWMD Project Number
CF Required
The project number associated with each project that received or is receiving District cooperative funding support. Project numbers are a single uppercase letter followed by three numbers such as K055, L051, K468. The summary report will be organized by District project numbers for those certain portions of the system that received or are receiving cooperative funding from the District. Those portions of the system not receiving such funding should enter N/A in this column.
FORMAT: 5 characters numbers and text.
Column 17 – Number of Service Boxes
CF Required
The number of reclaimed water service boxes or connections that have been installed within the service area covered by the customer's contract with the utility regardless of whether or not a meter has been installed. For example, give the total number of reclaimed water service boxes installed at all residences within a subdivision where each residence is capable of receiving reclaimed water service, whether the residence is using reclaimed water or not.
FORMAT: 6 – digit number.
Column 18 – Number of Active Customers
FDEP Required and CF Required
The number of accounts (or service boxes) that are actually connected and actively using reclaimed water in the service area during the reporting period. For example, if a subdivision with 1,000 accounts (residences) has installed service boxes at each account, but only 500 accounts actually receive AND use reclaimed water, the entry in this field is "500" while entry for the previous field would be "1,000."
FORMAT: 6 – digit number.
Column 19 – Proposed or Contracted Reclaimed Water to the Customer or Use (gpd)
CF Required
The planned delivery volume, in gpd, of the reclaimed water system that was or is being constructed under the terms of the cooperative funding agreement for the customer named in Column 5 or the Use listed in Column 6. Typically, this flow should reflect the volume required to meet the negotiated contract(s) between the utility and the reclaimed water customer. NOTE: This is not the total capacity of the system nor is it the build out volume ultimately planned for the system.
FORMAT: 8 – digit number.
Column 20 – Actual Reclaimed Water Disposal Quantity (gpd)
Required
The annualized (for the water year) actual quantity of reclaimed water that was disposed of via Rapid Infiltration Basins (RIBs), deep well injection, surface water disposal or spray fields during the reporting period. Please note: Spray fields, RIBs, surface water disposal and deep well injection are included on this form (as they can be reported to FDEP).
FORMAT: 8 digit number.
Column 21 – Actual Reclaimed Water Flow (gpd)
Required
The actual reclaimed water flow, in gpd, that was delivered during the reporting period to reclaimed water customers or customer categories.
FORMAT: 8 – digit number.
Column 22 – Project Proposed Offset (gpd)
CF Required

The volume of potable-quality water, in gpd, that was projected to be offset (or saved) by the reclaimed water projected to be provided through this project.
FORMAT: 8 – digit number.
Column 23 – Actual Public Supply Offset (gpd)
CF Required
The actual potable – quality water from the public water supply system, in gpd, that was offset by the actual amount of reclaimed water supplied to this customer or service area during the reporting period.
FORMAT: 8 – digit number.
Column 24 – Actual Private Supply Offset (gpd)
CF Required
The actual self-supplied potable-quality groundwater or surface water that customers discontinued using, in gpd, because they received reclaimed water during the reporting period.
FORMAT: 8 – digit number.
Column 25 – Offset Calculation Method
CF Required
Indicate whether the flow data previously provided in this reporting was metered (Meter) flows or estimated (Est.) values derived from master meters, plant pumpage, or similar indirect measurement procedures.
DOMAIN CODES: Meter, Est.
Column 26 – Acreage Irrigated with Reclaimed Water
FDEP Required
The measured, calculated, or estimated acreage, by customer type, that is irrigated by reclaimed water made available through this project. Spray fields and RIBs are not considered irrigation.
FORMAT: 5 – digit number.
Column 27 – Reclaimed Water Rate/1,000 Gallons
CF Required
Provide the rate or rates charged, if the service is based on a block rate structure, per 1,000 gallons ($/Kgal) within the respective reclaimed water service areas. Data in this column should not include any fixed fees for wastewater service, initial reclaimed water connection, price of meters, base fees, or related fixed costs. If the utility does not base its charge on 1,000 gallon blocks, then leave blank.
FORMAT: US Currency, 5 digits $###.## or Blank
Column 28 – Reclaimed Water Flat Rate Per Month
CF Required
The flat rate charged by the utility for reclaimed water service. This should not include any fixed fees for wastewater service, initial reclaimed connection, price of meters, base fees, or related fixed costs. If the utility does not charge a flat monthly fee, then leave blank.
FORMAT: US Currency, 6 digits $#,###.## (Do not enter the comma.)
Column 29 – Reclaimed Water Contracted Delivery Quantity (gpd)
CF Required
The volume of reclaimed water, in gpd, that the customer has agreed to take from the utility to the end of the contract term stipulated in Column 31. For those permittees co-funded through the District, this number should be the same as the volume specified in their Cooperative Funding agreement with the District.
FORMAT: 8 – digit number.
Column 30 – Reclaimed Water Contract Start Date
CF Required
The date specified in the contract as the beginning date of service for reclaimed water.
FORMAT: mm/yyyy (valid year range 1975-2010).
Column 31 – Reclaimed Water Contract End Date
CF Required
The date specified in the contract between the utility and the reclaimed water customer and stipulates when reclaimed service will terminate.
FORMAT: mm/yyyy (valid year range 1975-2050).
Column 32 – Reclaimed Water Delivery Mode
Required
A code entry showing how the reclaimed water is supplied for reuse. The codes are:

- "P" which identifies reclaimed water delivered under sufficient pressure for immediate use by the reclaimed water customer.

- "S" which identifies reclaimed water delivered under pressure for delivery into on-site storage for later use by the reuse customer.

DOMAIN CODES: P, S (Dropdown available.)
Column 33 – Interruptible Service Agreement
CF Required
Enter "Yes" or "No" signifying that service to this customer is through an agreed-upon interruptible basis. Specifically, if reclaimed water availability is insufficient for overall system demand, this customer can have its service interrupted (suspended) until sufficient reclaimed water supply is again available. The customer would have to activate standby quantities from the water source used prior to becoming a reclaimed water customer if the customer's water use permit provides for reinstatement of these previously permitted quantities if they lost reclaimed water through no fault of their own. Note: Does not include emergency interruptions.
DOMAIN CODES: Yes, No
Column 34 – Month & Year Reuse First On-Line
CF Required
The month and year that reclaimed water was actually first used by this customer whether as part of the reclaimed water contract or prior to execution of a reclaimed water contract.
FORMAT: mm/yyyy (valid year range 1975-2010)
Column 35 – Customer's Location in a WUCA
Optional
Identifies if the customer is located in a SWFWMD water use caution area (WUCA), and if so, which one. This is a code entry using the following codes:

- SWUCA is the Southern Water Use Caution Area
- NTB is the Northern Tampa Bay Water Use Caution Area
- N/A if they are not in a Water Use Caution Area ~~(do not leave this column blank).~~

DOMAIN CODES: SWUCA, NTB or N/A (Dropdown available.)
Column 36 – Traditional Source
Optional
The water source(s) identified in the water use permit for each of the reclaimed water customers. This source is represented by a code entry using the following codes:

- FL is the Floridan Aquifer
- IA is the Intermediate Aquifer
- SA is the Surficial Aquifer
- SW is surface water withdrawal
- DES for desalination
- PRMRWSA for the Peace River Manasota Water Supply Authority
- TBW for Tampa Bay Water

DOMAIN CODES: FL, IA, SA, SW, DES, PRMRWSA, TBW (Dropdown available.) For multiple sources, direct entry of the codes, separated by commas, are allowed in this column. (Do not use the dropdown for multiple source entry)
Column 37 – Basin Board
Optional
Identifies in which Basin Board the customer is located in. This is a code entry using the following codes:

- ALA – Alafia River
- WITH – Withlacoochee River
- COASTCoastal Rivers
- P-A – Pinellas Anclote River
- NW HILLS – Northwest Hillsborough River
- HILLS – Hillsborough River
- MANManasota
- PR Peace River

DOMAIN CODES: WITH, COAST, P-A, NW HILLS, HILLS, MAN, PR (Dropdown available.)
Column 38 – WAFR ID
FDEP Required
Wastewater Facility Regulation Identification Number. If more than one treatment plant supplies the reclaimed water system, only the WAFR ID is necessary for the wastewater facility that supplies the most reclaimed water to this customer.

FORMAT: 9 – character input: 3 text + 6 – digit number or 9 – digit number
Column 39 – WWTP Treatment Level
FDEP Required
Identify the level of treatment (using FDEP coding) at all the wastewater treatment plant (WWTP) for the WAFR ID Number given in column 38.

- AWT – Sufficient for surface water discharge.
- HI – Sufficient for public access reclaimed water.
- BA – Not sufficient for public access reclaimed water

DOMAIN CODES: AWT, HI, BA (Dropdown available.)
Column 40 – Reclaimed Water Storage Type
Required
Identify the type of reclaimed water storage facility used at the WWTP identified by the WAFR ID number in Column 38.

- POND = Surface water impoundment
- TANK = above ground or in-ground tank
- ASR = stored in an aquifer

DOMAIN CODES: POND, TANK, ASR (Dropdown available)
Column 41 – Reclaimed Water Storage Volume (Million Gallons)
Required
Provide the total storage volume in million gallons per storage type at the WWTP identified by the WAFR ID number in Column 38.
FORMAT: numeric up to 10 characters
Column 42 – Comments
Optional
Unlimited entry because this column is formatted to wrap text.
PAGE 2
The permittee shall input total gallons delivered to all bulk customers (column 5 on Page 1) or to all reclaimed water use categories (column 6 on Page 1) for the months of October through September of the following year.

4. CONDITIONS FOR ISSUANCE-TECHNICAL CRITERIA

Section 373.223, F.S., provides a three-prong test for evaluating each proposed water use: the use must be reasonable and beneficial, must not interfere with any existing legal use of water, and must be consistent with the public interest. Reasonable assurances that water use on both an individual and cumulative basis meets this three-prong test is provided by the Applicant's compliance with the Conditions for Issuance, set forth in Rule 40D-2.301, F.A.C.

This Chapter provides guidelines for determining whether a water use meets the Conditions for Issuance set forth in Rule 40D-2.301, F.A.C. If the criteria described in this Chapter are not met, Applicants may consider reduction of withdrawal quantities, a pumpage rotation schedule, mitigation, or other means to bring a proposed use into compliance with the Conditions For Issuance. For some criteria, presumptions have been developed to facilitate evaluation. If site-specific information is provided which demonstrates that the presumption is incorrect, this information will be used to evaluate compliance with the performance standards. For projects within the SWUCA with the purpose of restoration or enhancement of impaired or impacted water bodies, the existing condition referred to in the performance standards is considered to be the natural condition unaffected by withdrawals, structural alterations or changes rather than the impaired or impacted condition that exists currently. The information to be provided by permit applicants as described in this Chapter is required for all new water use permits and for renewal or modification of all existing water use permits, with the exception that applicants seeking to renew or modify water use permits authorizing withdrawal quantities of less than 100,000 gpd on an annual average basis will not be required to submit documentation with their application if the documentation requested has previously been submitted or the information is documented in District records and all conditions for issuance as established for the previously issued permit or permit revision continue to be met.
Revised 5-12-08.

4.1 REASONABLE DEMAND.

The proposed withdrawal of water must be supported with the information, specified in Section 3.0, demonstrating that the withdrawal quantities are necessary to supply a certain reasonable need or demand. Only the portion of demand that is supported by adequate documentation will be permitted.

4.2 ENVIRONMENTAL IMPACTS.

The withdrawal of water must not cause unacceptable adverse impacts to environmental features. Where appropriate, District staff will review the Applicant's submittal and identify the environmental features that are directly related to the water resources of the District and evaluate the impact of the Applicant's withdrawal, combined with other withdrawals, on those environmental features.

District Staff may inspect the site to delineate environmental features and evaluate the effects of withdrawals. For certain permits, the applicant may be required to supply additional information regarding the existing status and condition of associated environmental features. This information may consist of aerial photographs, topographic maps, hydrologic data, environmental assessments or other relevant information. Baseline hydrologic and/or environmental data collected prior to permit application shall be provided if available and requested by the District. The need for additional information may be established through pre-application meetings with the District.

Environmental features that will be evaluated by District staff when determining withdrawal impacts include:

1. Surface water bodies such as lakes, ponds, impoundments, sinks, springs, streams, canals, estuaries, or other watercourses.
2. Wetland habitats.
3. On-site environmental features and their relationship to local and regional landscape patterns.
4. Habitat for threatened or endangered species.
5. Other environmental features which are dependent upon the water resources of the District.

Potential environmental impacts will be evaluated by comparing the existing natural system to the predicted post-withdrawal conditions. Previous physical alterations to environmental features, such as drainage systems or water control structures will be considered. The District's objective is to achieve a reasonable degree of protection for environmental features consistent with the overall protection of the water resources of the District.

Listed below are the performance standards District staff will use to ensure that unacceptable adverse impacts to environmental features do not occur. Additionally, presumptions are described that the District will use as guidelines to predict whether withdrawals will cause unacceptable impacts. Impacts to canals, springs, and estuaries are considered under the streams criteria. Impacts to ponds, sinks, and impoundments are considered under the lakes criteria.

Compliance with the performance standards for permittees encompassed within the Comprehensive Plan set forth in Rule 40D-80.073, F.A.C., shall be addressed as specified in Rule 40D-80.073, F.A.C.
Revised 5/26/10.

A. Wetlands.

1. Wetlands Evaluated

In reviewing an application for a Water Use Permit, the District evaluates wetland impacts that are predicted to occur as a result of water withdrawals. The District defines "wetlands" as areas that are inundated by surface or ground water with a frequency to support, and under normal circumstances would support, a prevalence of vegetative or aquatic life that require saturated or seasonally saturated soil conditions for growth and reproduction, such as swamps, marshes, bayheads, cypress ponds, sloughs, wet prairies, wet meadows, river overflows, mud flats and natural ponds. The District regulates both wetlands contiguous to waters of the state as well as isolated wetlands which are not within the jurisdiction of DEP for purposes of dredge and fill.

2. Wetlands Not Evaluated

The District will not consider impacts to isolated wetlands less than 0.5 acres, unless:

a. A wetland is used by endangered or threatened species designated in Rules 39-27.003, 39-27.004, F.A.C., or 50 CFR 17.12. The District considers that a wetland is used by endangered or threatened species if reasonable scientific judgment indicates that the wetland provides a habitat function including, but not limited to, nesting, reproduction, food source or cover for such species.

b. A wetland is located in an area of critical state concern designated pursuant to Chapter 380, F.S.

c. Two or more wetlands regardless of property boundaries have a combined area greater than 0.5 acre and are connected by standing or flowing surface water during average wet season high water levels. This connection can be established by water elevation indicators such as lichens, adventitious roots, water stains, soil profiles, aerial photos or other acceptable measures.

3. Wetlands Affected By Mining Activities

Certain mining activities in wetlands are reviewed by the FDEP for wetlands impacts, wetlands reclamation, or by various reviewing agencies under the Development of Regional Impact (DRI) process. Mining and Dewatering use Applicants whose wetland activities are reviewed under any of these processes must submit to the District a mine plan which corresponds to the term of the permit identifying the items listed below. The permittee shall provide an updated mine plan to the District prior to any water use or dewatering activities which would impact wetlands because of changes to the previously submitted mine plan. For Mining and Dewatering use applications, the District will consider withdrawal impacts only to off-site wetlands and:

a. Wetlands to be preserved under applications and plans approved by DEP, or under a Development Order.

b. Wetlands created or required to be created as part of a reclamation plan or a mitigation plan approved by DEP.

c. Any other on-site wetlands that will not be mined.

Wetlands to be preserved shall be subject to mitigation options similar to those that apply along the property boundaries for dewatering activities. These mitigation options include a setback, a recharge ditch, or other methods to avoid unacceptable drawdowns in the area to be protected.

Applicants for Mining and Dewatering use which are not subject to DEP review for wetlands impacts or review for wetlands reclamation must submit for District approval a mine plan identifying all on-site wetlands.

4. Performance Standards

a. Wet season water levels shall not deviate from their normal range.

b. Wetland hydroperiods shall not deviate from their normal range and duration to the extent that wetlands 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 shall be temporally and spatially maintained, and not adversely impacted as a result of withdrawals.

d. Habitat for threatened or endangered species shall not be altered to the extent that utilization by those species is impaired.

Revised 1-1-07.

B. Lakes.

1. Performance Standards

Water levels in lakes shall not deviate from the normal rate and range of fluctuation, to the extent that:

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

2. Lake Impacts Within The SWUCA

a. Stressed Lake Definition-A stressed condition for a lake within the SWUCA is based on continuous monthly data for the most recent five-year period, with the latest readings being within the past 12 months, two-thirds of the values are at or below the adopted minimum low management level. For those lakes within the SWUCA without established management levels, stressed conditions shall be determined on a case-by-case basis through site investigation by District staff. The District maintains a list of lakes within the District which have been determined to be stressed. Lakes that have been classified as stressed will be evaluated for a recovered classification two years after the lake is determined to be stressed.

b. Recovered Lake Definition-Once a lake within the SWUCA is classified as stressed it will be taken out of that classification only when it is classified as recovered. A lake is recovered if it has fluctuated above its minimum low management level 60% of the time during the previous five-year period and has reached its maximum desirable stage during three of the previous five years, with an average duration of three months per year.

c. Stressed Lakes, New Withdrawals-Due to the cumulative impacts of ground water and surface water withdrawals, new withdrawals that affect stressed lakes within the SWUCA shall be permitted only if all the conditions for issuance are met and the permit contains a condition restricting withdrawals to those times when the lake is at or above the High Minimum Level or High Guidance Level, whichever is appropriate.

d. Stressed Lakes, Existing Withdrawals-Existing permitted surface withdrawals from stressed lakes within the SWUCA shall be abandoned or replaced with AWS within three years from January 1, 2003, if the withdrawal was not previously located within the Highlands Ridge Water Use Caution Area. Existing permitted withdrawals from lakes which are determined by the District to be stressed after January 1, 2003, shall be abandoned or replaced with AWS within three years of the notice to the permittees of the designation of the lake as stressed unless the permittee requests a modification of the permit to restrict withdrawals to those times when the lake is at or above the High Minimum Level or High Guidance Level, whichever is appropriate.
1-1-03, Revised 1-1-07.

C. Streams.

1. Performance Standards

a. Flow rates shall not deviate from the normal rate and range of fluctuation to the extent that water quality, vegetation, and animal populations are adversely impacted in streams and estuaries.

b. Flow rates shall not be reduced from the existing level of flow to the extent that salinity distributions in tidal streams and estuaries are significantly altered as a result of withdrawals.

c. Flow rates shall not deviate from the normal rate and range of fluctuation to the extent that recreational use or aesthetic qualities of the water resource are adversely impacted.

4.3 MINIMUM FLOWS AND LEVELS.

The District has adopted Minimum Flows and Levels for certain waters within the District. Those Minimum Flows and Levels are set forth in Chapter 40D-8, F.A.C. Through implementation in Rule 40D-2.301(1)(d), F.A.C., and this Section 4.3, those Minimum Flows and Levels are one criterion used by the District in evaluating applications for water use permits under Chapter 40D-2, F.A.C. Rule 40D-2.301(1)(d), F.A.C., this Section 4.3 and Chapter 40D-80, F.A.C., govern the manner in which this one criterion is utilized in evaluating a water use permit application. Accordingly**,** applicants shall demonstrate compliance with established Minimum Flows, Minimum Wetland Levels, Minimum Lake Levels and Salt Water Intrusion Minimum Aquifer Levels (hereinafter sometimes collectively called Minimum Flows and Levels) set forth in Chapter 40D-8, F.A.C., as follows:

A. Withdrawals That Affect Water Bodies for Which Minimum Flows and Levels Have Been Adopted Within the Northern Tampa Bay Water Use Caution Area.

In establishing Minimum Flows and Levels, the District has determined that the actual water levels in many of the water bodies for which Minimum Flows and Levels have been established are below the Minimum Flow and Level. The District is implementing a recovery strategy to address water bodies that are below their Minimum Flows and Levels. The recovery strategy, and associated mitigation plan, referred to as the Comprehensive Plan, is described in Rule 40D-80.073, F.A.C. The following requirements of this Section 4.3 A. effectuate part of the Comprehensive Plan and shall be effective only through December 31, 2020**.** Compliance with Section 4.3 A. does not, by itself, satisfy the other conditions for issuance of Chapter 40D-2, F.A.C., including Rule 40D-2.301, F.A.C.

1. For New Withdrawals Proposed After August 3, 2000, Except for Withdrawals Subject to 4.3 A.2. Below.

a. Where above Minimum Flow or Level-For water bodies that are predicted to be impacted by the proposed withdrawal and where the actual flow or level is at or above a Minimum Flow or Level, withdrawals shall be limited to that quantity, as may be further limited by other provisions of 40D-2.301, F.A.C., and this Basis of Review, that does not cause the actual flow to fall below the Minimum Flow, nor cause the actual level to fall below the Minimum Level on a long-term average basis (the "Baseline Quantity"). For purposes of this Section 4.3 A., "long-term" means a period which spans the range of hydrologic conditions which can be expected to occur based upon historical records, ranging from high water levels to low water levels. In the context of a predictive model simulation, a long-term simulation will be insensitive to temporal fluctuations in withdrawal rates and hydrologic conditions, so as to simulate steady-state average conditions. In the context of an average water level, the average will reflect the expected range and frequency of levels based upon historic conditions. This period will vary because reasonable scientific judgment is necessary to establish the factors to be used in the assessment of each application depending on the geology and climate of the area of withdrawal, the depth of and number of wells and the quantity to be withdrawn.

i. If the withdrawal of the requested quantity of water does not meet the condition in 4.3 A.1.a. above, the applicant shall identify the Baseline Quantity, and the District shall consider, as may be further limited by other provisions of 40D-2.301, F.A.C., and this Basis of Review, the authorization of the additional quantity of water to be withdrawn where the applicant:

(1) Demonstrates that there are no reasonable means to modify the proposed withdrawal to meet the conditions in 4.3 A.1.a., including the use of alternative supplies, to reduce or replace the amount of the requested quantity exceeding the Baseline Quantity. Cost shall not be the sole basis for determining whether the means are reasonable.

(2) Provides reasonable assurance that significant harm will be prevented to the wetlands and surface water bodies that could be affected by the proposed withdrawal if the requested quantity is withdrawn.

(3) Demonstrates that any measures used to provide the reasonable assurance specified in 4.3 A.1.a.i(2) above will not cause a violation of any of the criteria listed in 40D-2.301(1)(a)-(n), 40D-4.301, or 40D-4.302, F.A.C., as applicable.

ii. To support whether the applicant has provided reasonable assurance pursuant to 4.3 A.1.a.i(2) above, the applicant must submit an environmental management plan (EMP) for approval by the District describing the measures to be used to prevent significant harm from withdrawal of the requested quantity. The EMP must include a monitoring program for early detection of impacts to wetlands and surface water bodies that could be affected by the proposed withdrawal and an implementation scheme for corrective actions to prevent unacceptable adverse impacts. The EMP shall include provisions to evaluate changes in water quality, water levels, vegetation, and fish and wildlife. The EMP shall also include clear thresholds as to when the implementation scheme will be initiated. The implementation scheme shall include details as to how the proposed measures will be effected, the methods to be followed in order to functionally replicate the natural hydrologic regime of affected water bodies, and efforts to be undertaken to minimize the effects of changes in water chemistry. The implementation scheme shall also require reduction of pumping to the Baseline Quantity as a corrective action if no other measures, including supplemental hydration, are successful in preventing unacceptable adverse impacts to wetlands and surface water bodies due to withdrawals. An approved EMP shall be incorporated as a special condition to any permit issued.

(1) The measures proposed may include hydration of affected water bodies or modification of existing drainage structures to prevent significant harm to affected water bodies, provided that the measures within the EMP minimize the need for supplemental hydration to the greatest extent practical.

(2) If supplemental hydration is proposed, the applicant will be required to identify in the application and monitor a representative number of wetlands in the vicinity of the withdrawal. The monitored wetlands shall include a representative number of MFL or MFL surrogate wetlands not receiving supplemental hydration. An MFL surrogate wetland is the nearest wetland site of the same type and condition to the proposed withdrawal that is not anticipated to require supplemental hydration. The monitored wetlands shall also include, where available, non-MFL wetlands not receiving hydration as well as MFL and non-MFL wetlands proposed for supplemental hydration.

(3) A representative number of wetlands is a number of a particular type or types of wetland**s**, in the vicinity of the withdrawal, sufficient to adequately determine the hydrologic response of the wetlands and surface water bodies that could be affected by the proposed withdrawal to rainfall and water withdrawals.

(4) If supplemental hydration is proposed to rehydrate lakes or wetlands, in order for a water use permit authorizing the Requested Quantity to be issued, the applicant shall demonstrate that:

(A) The measures within the proposed EMP minimize the quantity of water required for supplemental hydration by raising water levels by filling or blocking ditches, removing culverts or outflows, or other alterations, where practical and feasible, and whether such alterations will achieve the applicable minimum level (where the measures proposed by the application identify the need for specific Environmental Resource Permits, (ERP) such permits must be obtained prior to withdrawal of the requested quantities.

(B) The applicant has proposed use of the lowest quality of water for rehydration which is scientifically, technically and environmentally feasible to prevent unacceptable adverse impacts;

(C) Measures within the proposed EMP minimize the need for ground water hydration to the greatest extent practical based on the quantity, frequency and duration of the anticipated use.

(D) The measures within the proposed EMP minimize or avoid the potential for unacceptable adverse impacts to water quality or fish and wildlife in the wetland or surface water body receiving supplemental hydration, and, if such a potential exists, the EMP contains adequate measures to detect impacts at an early stage and to prevent unacceptable adverse impacts in an expeditious manner;

(E) The measures within the proposed EMP minimize or avoid the potential for the establishment or spread of undesirable aquatic vegetation in the wetland or surface water body receiving supplemental hydration and, if such a potential exists, the EMP contains adequate measures to detect vegetative changes at an early stage and to prevent undesirable vegetative changes in an expeditious manner.

(F) The quantity of water needed for supplemental hydration is outweighed by the quantity of water made available for other uses.

(G) The quantity of water needed for supplemental hydration is reasonable compared to the unacceptable adverse impacts to be prevented.

(H) The unacceptable adverse impact to be prevented by supplemental hydration results in benefits that outweigh the potential for impacts caused by the additional withdrawal; and.

(I) The quantity of the water used for supplemental hydration is reasonable considering the proportion expected to percolate into the aquifer.

iii. Wetlands or other surface water bodies receiving supplemental hydration must have flow meters to measure the quantity of supplemental hydration water used at each site. This information shall be reported to the District as required by permit condition.

iv. Pursuant to Chapter 373, F.S., and Chapter 40D-2, F.A.C., permits may be conditioned to include aquifer regulatory levels intended to achieve compliance with one or more of the Chapter 40D-2, F.A.C., conditions for issuance, including 40D-2.301(1)(d), F.A.C., Minimum Flows and Levels criteria. The aquifer regulatory level that will be appropriate for any particular permit, considering all conditions for issuance, is the level that results from the more stringent condition.

v. If supplemental hydration with ground water is proposed pursuant to paragraph 4.3 A.1.a.i. and 4.3 A.1.a.ii, the applicant will be required to propose a Floridan aquifer regulatory level for each of the MFL wetlands (defined in 4.3 A.1.a.vi.(2)(A) below) or MFL surrogate wetlands not receiving supplemental hydration in the vicinity of the proposed water use permit. The aquifer regulatory level for each MFL wetland or MFL surrogate wetland not receiving supplemental hydration with ground water shall be the Floridan aquifer level that does not cause the Minimum Level to be exceeded on a long-term basis, based solely on withdrawal management. The aquifer regulatory level for MFL wetlands receiving supplemental hydration with ground water shall be the Floridan aquifer level taking into account the benefits of the hydration.

vi. The procedures described below are those applicable to the determination of an aquifer regulatory level relating to paragraph 40D-2.301(1)(e), F.A.C., where the District authorizes a quantity of Upper Floridan aquifer ground water pursuant to 4.3 A.1.a.i. where an applicant proposes prevention measures, and shall be determined for, and specified in**,** any permit issued as follows:

(1) The aquifer regulatory level is the long-term average potentiometric level that will not result in significant harm to a water body for which a Minimum Flow or Level has been established in 40D-8, F.A.C., taking into account the effects of prevention measures such as hydration on the impacted Minimum Flow or Level. The aquifer regulatory level for the Upper Floridan aquifer shall be proposed by the water use permit applicant with the permit application for review, modification as needed, and approval by the District as part of any permit issued. The aquifer regulatory level will be used to determine the annual average daily quantity for the permit that does not result in significant harm to water resources taking into account prevention measures such as hydration. The aquifer regulatory level is one of several long-term compliance tools that are evaluated by the District, but is not a mechanism to control withdrawals on a short term basis. The aquifer regulatory level and the

quantities granted based on this level shall be adjusted if data indicate that significant harm is occurring because of the withdrawals or if data indicates that additional withdrawals can be permitted without causing significant harm.

(2) The aquifer regulatory level for the Upper Floridan aquifer shall be calculated based on the relationship between the potentiometric level of the Upper Floridan aquifer and water levels in the surficial aquifer system and associated wetlands and lakes, taking into account the measures proposed by the applicant to prevent the significantly harmful impacts of withdrawals. The Floridan aquifer regulatory levels associated with MFL wetlands or MFL surrogate wetlands not receiving supplemental hydration, shall be equal to the Floridan aquifer level that does not cause the Minimum Level to be exceeded on a long-term basis, based solely on withdrawal management. The Floridan aquifer regulatory level associated with MFL wetlands that receive supplemental hydration shall be determined according to the following guidelines:

(A) Determine the historic average Upper Floridan aquifer potentiometric level in the vicinity of the wetland or lake for which a minimum wetland level or minimum lake level has been established in Chapter 40D-8, F.A.C. (Referred to hereafter as "MFL wetland" or "MFL lake," as applicable). The historic average potentiometric level is estimated for each site as follows:

(i) If an Upper Floridan aquifer monitor well is located in the vicinity, and if the available pre-withdrawal potentiometric level data are sufficient to capture the expected long-term range of pre-withdrawal potentiometric levels, then the historic average potentiometric level is calculated by taking the average of the pre-withdrawal potentiometric level data.

(ii) If an Upper Floridan aquifer monitor well is located in the vicinity, and if the available pre-withdrawal potentiometric level data are not sufficient to capture the expected long-term range of pre-withdrawal potentiometric levels, then the historic average potentiometric level shall be estimated using best available data and methods. Methods may include correlation of the available pre-withdrawal potentiometric level data to historic potentiometric data in other areas of the region and estimating the historic average potentiometric level at the site in question using statistical analysis.

(iii) If no pre-withdrawal potentiometric level data for an existing Upper Floridan aquifer monitor well in the vicinity are available, then the historic average potentiometric level is determined by adding the absolute value of the estimated current average cumulative drawdown at the well to the current average potentiometric level of the well.

(iv) If no Upper Floridan aquifer monitor well exists in the vicinity of each MFL lake or MFL wetland, the historic average potentiometric level can be determined based on an evaluation of regional aquifer potentiometric level data, including potentiometric surface maps.

(B) Estimate the resulting cumulative Upper Floridan aquifer potentiometric level drawdown at the location of the MFL wetland or MFL lake utilizing acceptable ground water flow models or analytical techniques**,** resulting from the proposed and existing withdrawals, taking into account the effect of the prevention measures proposed by the permit applicant such that the drawdown together with the prevention measures will not cause significant harm to the MFL wetland or MFL lake (hereinafter referred to as the "Resulting Drawdown").

(C) Subtract the Resulting Drawdown from the historic average potentiometric level to calculate the aquifer regulatory level.

(D) The Resulting Drawdown shall be determined using industry-standard ground water flow models or analytical techniques, based on best available aquifer-characteristic information, simulating long-term average water use and hydrologic conditions.

vii. If the District determines that reasonable assurances have been provided pursuant to 4.3 A.1.a., the District shall authorize the additional quantity of water to be withdrawn.

b. For new quantities that affect a water body that is below Minimum Flow or Level-requests for withdrawals of new quantities of water that are projected to impact a water body which is below its minimum flow or level shall not be approved unless the new quantities are used solely for furthering the attainment of the objective set forth in the Comprehensive Plan in Rule 40D-80.073, F.A.C.

2. Quantities Authorized to be Withdrawn as of August 3, 2000.

a. Where above Minimum Flow or Level-For water bodies that are affected by withdrawals and where the actual flow or level is at or above a Minimum Flow or Level, withdrawals, including those from the Tampa Bay Water Central System Facilities, shall be evaluated pursuant to 4.3 A.1.a. above.

b. Where below Minimum Flow or Level-For water bodies that are affected by the withdrawal and where the actual flow or level is below a Minimum Flow or Level:

i. Tampa Bay Water Central System Facilities.

Compliance with established Minimum Flows and Levels for waterbodies that are adversely impacted by withdrawals from the Tampa Bay Water Central System Facilities shall be addressed as specified in Sections 4.3 A. and 7.3 8., Part B, Basis of Review, of the Water Use Permit Information Manual and Rule 40D-80.073, F.A.C.

ii. Other Existing Permittees as of August 3, 2000.

Compliance with the performance standards for permittees encompassed within the Comprehensive Plan set forth in Rule 40D-80.073, F.A.C., shall be addressed as specified in Rule 40D-80.073, F.A.C.

Revised 11-2-09, 5-26-10.

B. Withdrawals Within the SWUCA That Affect Minimum Flows and Levels Water Bodies.

GENERAL.

In establishing Minimum Flows and Levels within the SWUCA as required by Section 373.042, F.S., and which are set forth in Chapter 40D-8, F.A.C., the District has determined that the actual flows and water levels for most of the water bodies for which Minimum Flows and Levels have been established are below the Minimum Flow and Level. The District is expeditiously implementing a recovery strategy for the SWUCA in keeping with the District's legislative mandates pursuant to Sections 373.036, 373.0361, 373.0421 and 373.0831, F.S. The SWUCA provisions of Chapter 40D-2, F.A.C., the Basis of Review For Water Use Permit Applications, and Chapter 40D-80, F.A.C., set forth the regulatory portion of the recovery strategy for the SWUCA. The District will conduct an annual assessment of water resource criteria and cumulative impacts and evaluate the status of the recovery strategy every five years prior to 2025, as provided in Rule 40D-80.074, F.A.C. Based on the annual assessment and five year evaluation, the District will revise this Section 4.3 B. in accordance with 40D-80.074, F.A.C. Compliance with Section 4.3 B. does not, by itself, satisfy the requirements of Chapter 40D-2, F.A.C., for applications requesting new withdrawals submitted on or after January 1, 2007.

As of January 1, 2007, within the SWUCA the District has established a Salt Water Intrusion Minimum Aquifer Level (SWIMAL) in the Most Impacted Area (MIA) as set forth in rule 40D-8.626, F.A.C., Minimum Flows on the Peace River as set forth in rule 40D-8.041, F.A.C., and Minimum Lake Levels as set forth in rule 40D-8.624, F.A.C. In accordance with the District's Minimum Flows and Levels priority list additional Minimum Flows and Levels will be established. These minimum flows and levels and the rules in Chapter 40D-2, F.A.C., that implement recovery are intended to manage those withdrawals that can have a direct effect on the Minimum Flows and Levels. Therefore, the effect of these Minimum Flows and Levels on applications for New Quantities will vary depending upon the impact of the withdrawal on a water body with an established Minimum Flow or Level. The District's evaluation of the potential impact of a proposed withdrawal will be based on factors such as the proximity of withdrawal to a Minimum Flow or Level water body, the volume of the withdrawal, the number of withdrawal points, and whether the withdrawal is from the upper Floridan, intermediate or surficial aquifer or is a direct surface water withdrawal.

New 1-1-07.

COMPLIANCE WITH RELATED PROVISIONS.

Satisfying the conditions of this Section 4.3 Minimum Flows and Levels shall also fulfill the provisions of Section 4.5 of this Basis of Review For Water Use Permit Applications with respect to the affected Minimum Flow or Level water body.

New 1-1-07.

APPLICATIONS FOR NEW QUANTITIES OF WATER SUBMITTED ON OR AFTER JANUARY 1, 2007.

Above Minimum Flow Or Level

For water bodies that are predicted to be impacted by the proposed withdrawal and where the actual flow or level is at or above a Minimum Flow or Level, withdrawals shall be limited to that quantity, as may be further limited by other provisions of 40D-2.301, F.A.C., and this Basis of Review, that does not cause the actual flow or level to fall below the Minimum Flow on a long-term average basis, or as compliance may be otherwise described in Rule 40D-8, F.A.C. For purposes of this Section 4.3 B., "long-term" shall have the meaning and be determined as set forth in Section 4.3 A. above.

New 1-1-07.

Below Minimum Flow or Level.

1. Existing Permits Within The SWUCA-Applications for the renewal or modification of a permit with no proposed increase in permitted quantities or change in Use Type will be evaluated to determine compliance with 40D-2.301, F.A.C., and this Basis of Review. When evaluating the reasonable-beneficial use of the water, emphasis will be given to reasonable water need, water conservation and use of AWS. However, the existing impacts of permitted quantities on an MFL water body will not be a basis for permit denial because the SWUCA Recovery Strategy taken as a whole is intended to achieve recovery to the established minimum flows and levels as soon as practicable.
New 1-1-07.

2. Self-Relocation-The quantities potentially available to Self-Relocate include all of the used and unused reasonable-beneficial permitted quantity. The use of the quantities at the new location(s) can not increase impacts to Minimum Flow and Level water bodies and must meet all other applicable permitting criteria included in 40D-2, F.A.C., and this Basis of Review. If the Self-Relocation involves uses eligible for water conserving credits, the credit balance at the time of the Self-Relocation will be maintained. If the Self-Relocation is only for a portion of the permitted quantity, or involves Self-Relocation to multiple properties, the credit balance will be accordingly apportioned. Crop rotation, by planting and irrigating non-contiguous properties within the same locale in a structured, revolving fashion, is allowed under a single permit and is not considered Self-Relocation.
New 1-1-07.

3. Applications For New Ground Water Quantities Submitted On Or After January 1, 2007-The District will evaluate applications for New Quantities of ground water to determine compliance with this section 4.3 B. and all other 40D-2, F.A.C., rule criteria. Any application for a change to a Use Type not authorized in the permit shall be required to provide a Net Benefit. In addition, when land is mined and the land will be returned to the Use Type operation authorized under the Water Use Permit prior to mining, such activity does not constitute a change in Use Type or New Quantity and a Net Benefit will not be required. The District will not accept a waiver of the 90-day time clock for acting on permits set forth in Section 120.60, F.S., on the basis of a request to re-evaluate of the proposed withdrawal at a future time.
New 1-1-07.

a. Salt Water Intrusion Minimum Aquifer Level (SWIMAL)-All applications shall be evaluated for the impact on the SWIMAL described in 40D-8.626(2)(a), F.A.C, utilizing a cumulative assessment based upon best available information. A proposed withdrawal is determined to impact the SWIMAL if it causes any lowering (>0.0 feet) of the Floridan aquifer potentiometric surface within the MIA including the boundary of the MIA. If the evaluation indicates that a proposed withdrawal will result in increased impacts to the SWIMAL, the District will approve the application only if the applicant proposes to implement a Net Benefit as described in paragraph 4. below.
New 1-1-07.

b. Upper Peace River-All applications shall be evaluated to determine whether the proposed withdrawal impacts ground water levels below the upper Peace River (as defined in 40D-2.021(10), F.A.C.). Where such an impact occurs, the proposed withdrawal is determined not to cumulatively impact upper Peace River flows if the current 10-year moving average monthly water level in the area is above 53.3 feet, NGVD (the median for the 10-year moving average monthly water level of available information during the period 1990 to 1999), and the proposed withdrawal individually meets the conditions of 40D-2.301(1)(b) and (c), F.A.C., and Basis of Review Section 4.2 C. If the above conditions are not met, the withdrawal can be authorized only if the applicant proposes to implement a Net Benefit as described in paragraph 4., below. However, the applicant has the option to reduce or redistribute the withdrawals to achieve no impact, in which case the withdrawal can be authorized. The current 10-year moving average ground water level will be calculated based upon District ground water monitoring stations in the ground water basin which best represent (adjustments for extraordinary local impacts on a well can be considered as to well location or water level effect) long-term trends in ground water levels affecting the upper Peace River, including ROMP 60, ROMP 59, ROMP 45, ROMP 30 and ROMP 31.
New 1-1-07.

c. Ridge Lakes-All applications shall be evaluated to determine whether the proposed withdrawal impacts ground water levels below Ridge Lakes (as defined in paragraph 40D-2.021(8), F.A.C.). Where such an impact occurs, the withdrawal is determined not to cumulatively impact Ridge Lakes levels if the current 10-year moving average monthly water level for the area encompassing the Ridge Lakes is above 91.5 feet, NGVD (the median for the 10-year moving average monthly water level of available information during the period 1990 to 1999), and the proposed withdrawal individually meets the conditions of 40D-2.301(1)(b) and (c), F.A.C., and Basis of Review Section 4.2 B. If the above conditions are not met, the withdrawal shall be authorized only if the applicant proposes

to implement a Net Benefit as described in paragraph 4., below. However, the applicant has the option to reduce or redistribute the withdrawals to achieve no impact, in which case the withdrawal can be authorized. The current 10-year moving average ground water level will be calculated based on District ground water monitoring stations in the ground water basin which best represent (adjustments for extraordinary local impacts on a well can be considered as to well location or water level effect) long-term trends in Floridan ground water levels affecting the Ridge Lakes including Lake Alfred Deep, ROMP 28X, ROMP 57, ROMP 43XX and Coley Deep.
New 1-1-07.

d. No Impact to Salt Water Intrusion Minimum Aquifer Level, Upper Peace River and Ridge Lakes-If the proposed withdrawal is determined to comply with 40D-2, F.A.C., and this Basis of Review, the withdrawal shall be authorized.
New 1-1-07.

4. Net Benefit

If an applicant must implement a Net Benefit to obtain the permit, a permit shall be issued if the applicant provides reasonable assurance that implementation of its proposed Net Benefit will mitigate the predicted impacts by one or more of the options listed below. In order to provide a Net Benefit, the measures proposed by the applicant must offset the predicted impact of the proposed withdrawal and also provide an additional positive effect on the water body equal to or exceeding 10% of the predicted impact. For example, if the predicted impact on a water body is 1.0 foot, the mitigation must offset the 1.0 foot impact and provide another 0.1 foot (i.e., 10% of 1.0 foot) of positive effect. There are three forms of Net Benefit, including 1) mitigation plus recovery, 2) use of quantities created by District water resource development projects, and 3) Ground Water Replacement Credits, as described below.
New 1-1-07.

a. Mitigation Plus Recovery-Mitigation plus recovery involves one or more of the following:

(1) Permanently retiring from use the reasonable-beneficial, historically used quantity associated with one or more permits within the SWUCA that impacts the same Minimum Flow and Level water body. Used quantities are those permitted quantities of water that the District determines have been deemed reasonable-beneficial and historically used by a permittee, but not including Water-Conserving Credits obtained pursuant to 40D-2.621, F.A.C. Used quantities are determined based on documentation previously submitted by a permittee and available crosschecks. The types of documentation submitted by permittees include seasonal/annual crop reports, metered data, and other information. Crosschecks include aerial photography, receipts for supplies, equipment, and services, property appraisers records and other methods. For small permits below thresholds for crop reporting and metering, aerial photography and other methods will be used to determine quantities, or

(2) Recharging the aquifer and withdrawing water such that there remains a net positive impact on the Floridan aquifer potentiometric surface at least 10% greater than the impact of the proposed withdrawal, or

(3) Undertaking other actions to offset the proposed impact of the withdrawal plus 10%.

Mitigation plus recovery must be in reference to the MFL water body that would be impacted by the proposed withdrawals, and must either precede or be coincident with any new permitted withdrawals.
New 1-1-07.

b. Use of Quantities Created by District Water Resource Development Projects As A Net Benefit.

The District anticipates that its water resource development projects may result in the development of new quantities above and beyond the quantities needed to achieve recovery to Minimum Flows and Levels. All or a portion of these new quantities that are not reserved or otherwise designated for recovery will be made available to permit applicants and used as a Net Benefit to offset proposed withdrawals that would impact an MFL water body.

If an applicant is required to provide a Net Benefit as described in section 3. above and has contributed to a District water resource development project, the applicant may apply for quantities made available through a District water resource development project as a Net Benefit, provided the applicant demonstrates that:

(1) The proposed withdrawal affects the same MFL water body source associated with the water resource development project;

(2) The quantity developed in excess of the quantity reserved or otherwise designated for the Minimum Flow or Level has been determined.

(3) The proposed Net Benefit quantities will not interfere with quantities reserved or otherwise designated by the District for water resource development.
New 1-1-07.

c. Ground Water Replacement Credit in the SWUCA

To reduce ground water withdrawals, a Ground Water Replacement Credit is proposed as an incentive for water users to provide water use permit holders with alternative supplies. The holder of a Ground Water

Replacement Credit can use the Credits to provide a Net Benefit in order to withdraw New Quantities. The process to obtain a Ground Water Replacement Credit is set forth below:

(1) A Ground Water Replacement Credit is created when an entity (Supplier) provides an alternative water supply, not previously delivered to another user to offset ground water withdrawals, that offsets actual withdrawals by an existing permit holder (Receiver) that impact a Minimum Flow or Level water body. A Ground Water Replacement Credit will be available to either the Supplier or the Receiver, or both.

(2) A Ground Water Replacement Credit will be issued for an amount equal to a specified percent of the amount that is offset that was reasonable-beneficial historically used. For those offsets made prior to January 1, 2000, but within the applicant's current permit term, the Credit will be equal to 50% of the offset. For those offsets made after January 1, 2000, the Credit will be equal to 90% of the offset.

(3) The Supplier and Receiver shall apply to the District for the credit and indicate to the District which entity should obtain the credit quantity, or whether the credit quantity will be divided between them or assigned to a third party.

(4) The District will set aside the ground water quantities that are discontinued as a result of the offset by AWS in a standby permit that will be issued to the Receiver to allow withdrawal of all or a portion of such quantities in the event that the alternative water supply is interrupted, becomes unsuitable or is decreased.

(5) The Ground Water Replacement Credit will exist for only so long as the Receiver maintains its use of the AWS. The Credit will remain available if the Receiver transfers the standby permit to a new owner at the same site who continues the same water use with the AWS.

(6) Only withdrawals that meet the permitting criteria of Chapter 40D-2, F.A.C., and this Basis of Review, including Minimum Flows and Levels criteria, may be made pursuant to a Ground Water Replacement Credit.

(7) Reclaimed water suppliers shall not be eligible for a Ground Water Replacement Credit when they redirect reclaimed water from existing reclaimed water users to other reclaimed water users and such redirection causes an existing reclaimed water user to reinstate permitted standby ground water withdrawals, unless the reclaimed water provider can demonstrate that the cumulative effect of such redirection will be a greater reduction in ground water withdrawals and will contribute more the recovery of MFL waterbodies in the SWUCA than would otherwise occur absent of the redirection.

New 1-1-07.

5. Surface-Water Withdrawals Within the SWUCA

The District will not issue permits for surface-water withdrawals from streams or lakes where the Minimum Flow or Level is not achieved unless the applicant demonstrates that:

a. The withdrawal will not adversely affect the Minimum Flow or Level.

b. A Net Benefit, as described in paragraph 4. above, can be implemented.

New 1-1-07.

C. Withdrawals That Affect the Minimum Aquifer Level Established within Dover/Plant City Water Use Caution Area

A Minimum Aquifer Level has been established in Rule 40D-8.626(3), F.A.C., for Well DV-1 that is located within the Dover/Plant City WUCA, as shown in Figure 7.4-2 in the WUP Basis of Review, described in 40D-2.091. The Minimum Aquifer Level is affected by local and regional groundwater withdrawals. In order to compensate for the variable hydrogeologic factors within the region, a Minimum Aquifer Level Protection Zone is established based on the 30 ft. drawdown contour for the January 2010 frost/ freeze event as shown in Figure 7.4-3. In establishing the Minimum Aquifer Level, the District has determined that the actual water level is below the Minimum Aquifer Level. As required by law, the District is expeditiously implementing a Recovery Strategy for the Minimum Aquifer Level. The Dover/Plant City WUCA provisions of the WUP Basis of Review incorporated by reference in 40D-2.091, F.A.C., and Chapters 40D-2, 40D-8 and 40D-80, F.A.C., set forth the regulatory portion of the recovery strategy for the Minimum Aquifer Level. Compliance with the Minimum Aquifer Level and the Minimum Aquifer Protection Zone by applicants with withdrawals for frost/freeze protection within or proposed to be within the Dover/Plant City WUCA and all other applicants for withdrawals for frost/freeze protection that have the potential to impact the Minimum Aquifer Level and the Minimum Aquifer Protection Zone will be addressed as specified in Section 7.4 of the WUP Basis of Review. Compliance with Section 7.4 does not, by itself, satisfy the requirements of Chapter 40D-2, F.A.C., for applications submitted on or after June 16, 2011.

D. For areas not subject to 4.3 A., B. or C. above, water withdrawals must not cause:

1. Lake levels to be reduced below the applicable Minimum Level established in Chapter 40D-8, F.A.C.

2. Streamflow to be reduced below the Minimum Flow as established in Chapter 40D-8, F.A.C.

3. Potentiometric surface or water-table levels to be reduced below the Minimum Level established in Chapter 40D-8, F.A.C.

History Note: 4.3 Revised 8-3-00; 4.3A. New 8-3-00; 4.3B, Revised 8-3-00, 1-1-07.6-16-11.

4.4 UTILIZATION OF LOWEST QUALITY WATER.

Consideration must be given to the lowest quality water available, which is acceptable for the proposed use. If a lower quality of water is available and is environmentally, technically and economically feasible for all or a portion of an Applicant's use, this lower quality water must be used. Use of a lower quality of water is not environmentally feasible if it interferes with recovery of a water body to its established minimum flow or level or the water body is either currently or projected to be adversely impacted, unless the use will provide a Net Benefit. Such lower quality water may be in the form of surface water, reclaimed water (treated wastewater effluent), recovered agricultural tailwater, collected stormwater, saline water, or other sources. In determining the economic feasibility of using reclaimed water or stormwater, the consideration shall include the costs and benefits of using the reclaimed water or stormwater, including the amount of reclaimed water or stormwater that can be produced or used relative to the cost. Within the Central Florida Coordination Area the District will confine its analysis of lower quality water sources to those sources listed in the definition of Supplemental Water Supply in paragraph A.7. under the heading Requirements For Applicants For Groundwater Withdrawals Within The Central Florida Coordination Area is Section 3.6. of Part B, Basis of Review, of the Water Use Permit Information Manual.

Revised 1-1-07, 2-13-08.

4.5 SALINE WATER INTRUSION.

1. Performance Standards

A permit application shall be denied if the application requests withdrawals that would cause significant saline water intrusion. Significant saline water intrusion occurs if the applicant's withdrawals are projected to cause movement of the salt water interface which adversely affects, or is predicted to adversely affect, other existing legal uses of water; the Applicant; or the public health, safety, and general welfare.

Compliance with the performance standards for permittees encompassed within the Comprehensive Plan set forth in Rule 40D-80.073, F.A.C., shall be addressed as specified in Rule 40D-80.073, F.A.C.

Revised 1-1-07, 5/26/10.

4.6 INDUCEMENT OF POLLUTION.

A permit application shall be denied if a water withdrawal would significantly degrade the water quality of the aquifer by causing pollutants to spread. Generally, movement of a contamination plume is considered significant if the withdrawal would cause violations to ground water quality standards in areas which previously would have been unaffected. In evaluating this criterion, the District will consider:

1. Whether the withdrawal would alter the rate or direction of movement of a plume (horizontally or vertically) that has been defined by the DEP or the EPA.

2. Whether the withdrawal would increase the potential for harm to the public health and safety.

4.7. (Reserved)

4.8 INTERFERENCE WITH EXISTING LEGAL WITHDRAWALS.

1. Performance Standards

A permit application shall be denied if the withdrawal of water together with other withdrawals would cause an unmitigated adverse impact on a legal water withdrawal existing at the time of the application. An adverse impact is considered to occur when the requested withdrawal would impair the withdrawal capability of an existing legal withdrawal to a degree that the existing withdrawal would require modification or replacement to obtain the water it was originally designed to obtain. If withdrawal locations remain the same but quantities are increased, only the increased amount would be considered in addressing the impacts to existing users.

If other legal uses come into existence after a permit is issued and the permit is subsequently modified, District staff will evaluate the modification such that impacts to the subsequent uses are only assessed in terms of the modified quantities.

The evaluation of impacts will be made taking into account the type(s) of pumping equipment installed and water-level fluctuations.

Staff will not recommend approval of a requested quantity that will cause adverse impact unless the adverse impact is mitigated by the Applicant. Mitigation may include mitigation prior to withdrawals as well as mitigation after the withdrawal. It is the Applicant's responsibility to investigate and mitigate adverse impacts on presently existing legal withdrawals. Mitigation may include pumpage reduction, replacement of the impacted individual's equipment to enable greater withdrawals, or placement of wells farther away from the impacted well.
Paragraph below transferred from Chapter 2, Section 2.5
Service areas are not considered to be under the control of the Applicant in terms of consideration of off-site impacts. Where there is a potential for adverse impacts to existing legal users due to the applicant's withdrawals, whether within or outside the applicant's service area, the applicant shall submit a plan by which the potential impacts shall be monitored and mitigated if such impacts should occur. Nothing in this provision shall affect continuation of Tampa Bay Water's Well Mitigation Policy set forth in Rule 49B-3.005, F.A.C., dated May 20, 2001.
Transferred from Chapter 2, Section 2.5 4-27-10.

4.9 (Reserved)

4.10 WATER CONSERVATION.

Applicants shall demonstrate that any economically and practicably feasible water conservation activities related to their use have been or will be implemented. Water conservation measures that have been approved by the Governing Board shall be implemented. Where specific water conservation elements have been developed for specific use types, such as water conservation plans for public supply use or best water management practices for agricultural uses, these elements shall be incorporated into the permit.

4.11 UTILIZATION OF ALTERNATIVE WATER SUPPLIES.

Applicants shall demonstrate whether AWS are available and appropriate for use and shall incorporate use of AWS to the greatest extent practicable. Use of AWS is not environmentally feasible if it interferes with recovery of a water body to its established Minimum Flow or Level or if the water body is either currently or projected to be adversely impacted. In determining whether an Applicant has demonstrated that AWS are available and appropriate for use, the District shall consider whether the AWS are economically, environmentally and technically feasible. Additionally, applicants with groundwater withdrawals in the Central Florida Coordination Area are subject to the provisions in the Basis of Review in Section 3.6, under the heading "Requirements For Applicants For Groundwater Withdrawals Within The Central Florida Coordination Area".
Revised 1-1-07, 2-13-08.

4.12 WASTE.

Water withdrawals must not result in the waste of water, as defined in Rule 373.203(4). Waste is the causing of excess water to run into a surface water system, unless the water is thereafter put to beneficial use. In addition, any off-site discharges must meet applicable state water quality standards, as set forth in Chapter 17-3, F.A.C.

1. Runoff-Water use activities which result in runoff will be required to reduce or eliminate such runoff. For existing systems or facilities, a reasonable time to implement a reduction or elimination of runoff may be allowed by permit condition. New uses or modifications of existing uses which include significant runoff will not be recommended for approval.
2. Augmentation-Augmentation for aesthetic purposes is a non-essential use and has a lower value compared to other reasonable/beneficial uses. The following criteria apply to augmentation applications:
    a. Augmentation for aesthetic purposes is limited to less than 100,000 gpd.
    b. Augmentation for uses other than aesthetic is limited to the quantity needed for the use. Where there is a subsequent withdrawal from or use of the augmented body, the augmentation quantity is limited to the quantity needed for that use. This applies to such uses as cattle-watering, golf course irrigation, etc.
    c. Aesthetic augmentation is allowed only into impoundments that connect to the water table, at least at the seasonal high level, or the impoundment must be lined to prevent infiltration. Liners should have a permeability of 10^{-3} gal/day/ft^2 or less.
    d. Seasonal fluctuation schedules may be required. The amount of fluctuation on the characteristics of the impoundment. Installation and monitoring of staff gauges and unaffected (background) water-table monitor wells may be required to demonstrate the fluctuation. Fluctuation should be sufficient to expose one half of the littoral zone each year and to allow for extreme exposure approximately every 5 years to an elevation at least 3 ft below normal water level.

e. Native aquatic vegetation should be promoted in shallow areas of the impoundment for water quality purposes. Proposed impoundment designs should incorporate slopes that mimic natural lake bottoms.

f. Allowing water withdrawn from an aquifer to routinely exit the augmented impoundment as discharge is prohibited. Sufficient freeboard must be maintained between the maximum augmented level and the invert of the outfall structure so that only water received from rainfall events is discharged. The augmented impoundment shall be designed to hold a run-off volume equal to a 1-inch rainfall event over the entire contributing basin.

g. Augmentation of surface water management systems must not impair their designed function. Applicants intending to augment surface water management systems are required to supply the surface water permit or application number. Augmentation of surface water retention/detention ponds can be permitted providing the Applicant demonstrates that the function of the system is not impaired.

h. Levels may be set on the augmented water body beyond which augmentation is disallowed. Installation of a float-gauge mechanism to automatically cease withdrawals may be required, as well as reporting of water levels and pumpage.

i. Back-flow prevention measures must be incorporated into the augmentation system, either through the installation of back-flow prevention devices, or by system design.

3. Augmentation Within The SWUCA

a. Augmentation means using one source of water to supplement another. Typically, augmentation involves using ground water to supplement the surface water levels of lakes, ponds and wetlands. Augmentation may be required by the District to mitigate the impacts of withdrawals within the SWUCA, or it may be requested by an applicant who wishes to raise surface water levels. Within the SWUCA, augmentation is permitable provided that the benefits outweigh any adverse impacts to ground or surface water resources, depending on the specific situation.

b. Augmentation for maintenance of lake and wetland natural habitat within the SWUCA can be permitted as long as no significant adverse impacts result from the withdrawal. Augmentation may be allowed provided that 1) alternative solutions have been addressed, 2) the need for such augmentation has been established, 3) withdrawals for augmentation do not cause significant adverse impacts, and 4) measures are taken to allow the surface water level to fluctuate seasonally as described in Section 4.12 2.d. of the Basis of Review. Augmentation above District-established applicable minimum water levels is prohibited. Maximum ground water augmentation levels for lakes within the SWUCA currently below established minimum water levels will be based on recent historical levels.

c. Augmentation for purely aesthetic purposes, such as for creating and maintaining water levels in constructed ponds, shall not be permitted within the SWUCA. Existing permits which include aesthetic augmentation may be renewed only if the criteria of Section 4.12 2.c. Through i. are implemented. Reuse of water through tailwater recovery ponds in efficiently managed systems is encouraged and is not considered augmentation. 1-1-03.

4. Discharges allowed-The District shall allow those discharges:

a. Which are required to ensure the integrity of an impoundment to protect the public health and safety.

b. Which are utilized for maintenance of environmental features.

c. Where the applicant demonstrates that any economically and technically feasible water conservation measures have been or will be implemented.

4.13 OTHERWISE HARMFUL.

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

5.0 MONITORING REQUIREMENTS

Issuance of a Water Use Permit requires that 1) the withdrawals will not cause any unmitigated adverse impacts on the water resources and existing legal users, and 2) the use continues to be in the public interest. To ensure that these criteria continue to be met after a permit is issued, monitoring and reporting activities may be required as conditions of the permit. Where appropriate, the District's monitoring requirements may be satisfied using facilities required by other agencies.

5.1 WITHDRAWAL QUANTITY.

Metering.

Metering requirements will be as set forth in Section 7.4 of the WUP Basis of Review incorporated in 40D-2.091, F.A.C., for any permit issued for frost/freeze quantities or permitted for 100,000 gpd annual average or greater within the Dover/Plant City WUCA or any permit with frost/freeze quantities authorized to be used or withdrawn from any combination of sources that if withdrawn from groundwater alone would have the potential to impact the Minimum Aquifer Level Protection Zone established for the Dover/Plant City WUCA. All other Individual and general water use permittees will be required to meter the quantity of water withdrawn from any source in accordance with the guidelines described in this section. Metering of actual pumpage provides a means to develop historical records in order to accurately project future reasonable demand, assess impacts to the resource and existing water and land uses, and ensure that quantities withdrawn do not exceed permitted pumpage. Monitoring methods must maintain plus or minus 5% accuracy, and must be approved by the District. Permittees shall use direct flow measuring devices unless the District determines direct methods are inappropriate for the particular water use system.

Permittees shall meter withdrawal quantities from each withdrawal point and provide meter readings to the District at a frequency to be prescribed by permit conditions when:

1. Issued an individual water use permit.
2. Issued a general water use permit for public supply use.
3. Issued a general water use permit and one or more of the withdrawal points is located within the SWUCA or Northern Tampa Bay WUCA;
4. The District determines that there is a potential for harm to the resource or potential for adverse impacts to existing users.
5. In accordance with Section 7.4, Dover/Plant City WUCA, of the WUP Basis of Review described in 40D-2.091, F.A.C. Where automatic reading devices are installed and withdrawal data is provided to the District via this device as specified in the WUP Basis of Review Section 7.4 4., the permittee shall no longer be required to independently submit withdrawal quantities except in the case of device failure.

Revised 4-27-10, 6-16-11.

The cost of operation and maintenance of all meters and reporting of data shall be the responsibility of the permittee.

Revised 4-27-10.

Monitored permittees shall, upon request of the District, provide the District an opportunity to perform measurements of flow during system operation. The District will ensure that the measurements are made in a manner that does not interfere with the permittee’s water use activities.

Ordinarily, withdrawal quantities shall be totalized on a monthly basis and reported to the District by the tenth day of the following month. However, for intense uses such as frost/freeze protection, or for stream withdrawals, a permittee may be required to totalize pumpage on a daily basis from each withdrawal point and report the daily withdrawal quantities to the District within two weeks.

Revised 12-30-08, 6-16-11.

Meter Installation.

New withdrawals that are required to be metered shall be metered within 90 days after construction of the withdrawal facility is completed. Existing withdrawals within the SWUCA not previously required to be metered were required to be metered by January 1, 2003. Once a withdrawal point is required to be metered, it shall remain so, and pumpage shall continue to be reported, even if the withdrawal point is later associated with a permit below metering thresholds. Typically, individual withdrawal points permitted for less than 10,000 gpd are not required to be metered.

1-1-03, Revised 4-27-10.

Metering of Alternative Water Supplies.

New and renewal permittees shall meter alternative supplies of water supplied to the permittee if the Annual Average quantity (Drought Annual Average quantity for irrigation permits) that would be permitted without the AWS would be 100,000 gpd or more. Meters shall meet the requirements of the first unnumbered paragraph of this Section 5.1, unless alternative methods or mechanisms are approved by the District. Reporting requirements are as specified in the fifth unnumbered paragraph of this Section 5.1. Receipt and use of AWS, including tailwater recovery or rainfall capture systems, metering, and reporting requirements will be as set forth in Section 7.4 of the WUP Basis of Review incorporated in 40D-2.091, F.A.C., for any permit with frost/freeze quantities within the Dover/Plant City WUCA or any permit with frost/freeze quantities authorized to be used or withdrawn from any combination of sources that if withdrawn from groundwater alone would have the potential to impact the Minimum Aquifer Level Protection Zone established for the Dover/Plant City WUCA.
1-1-03, Revised 1-1-07, 4-27-10, 6-16-11.

Flow Meters.

All required flow meters shall adhere to the following requirements and shall be installed and maintained as follows:

1. All meters shall be non-resettable, totalizing flow meters that have a totalizer of sufficient magnitude to retain total gallon data for a minimum of the three highest consecutive months' permitted quantities. If other measuring devices or alternative accounting methods are proposed, prior to installation, the permittee shall submit documentation that the other measuring devices or accounting methods meet the accuracy requirement provided below. If the alternative accounting method involves a meter belonging to another entity or to an alternative water supply provider, the permittee shall submit documentation from the owner/supplier that the meter readings conform to these meter requirements. Approval for other measuring devices or accounting methods must be obtained in writing from the Regulation Department Director.
    a. The flow meter(s) or other approved flow-measuring device(s) shall have and maintain an accuracy within 5% of the actual flow as installed.
    b. Accuracy testing requirements:
        i. For newly metered withdrawal points, the flow meter installation shall be designed for inline field access for meter accuracy testing.
        ii. The meter shall be tested for accuracy on-site, as installed, every five years beginning from the date of its installation for new meters or from the date of initial issuance of the permit.
        iii. The testing frequency will be decreased if the permittee demonstrates to the satisfaction of the District that a longer period of time for testing is warranted.
        iv. The test will be accepted by the District only if performed by a person certified on the test equipment used as described in the section entitled Flow Meter Verification, below.
        v. If the actual flow is found to be greater than 5% different from the measured flow, within 30 days the permittee shall have the meter re-calibrated, repaired, or replaced, whichever is necessary. Documentation of the test and a certificate of re-calibration, if applicable, shall be submitted within 30 days of each test or re-calibration.
2. The meter shall be installed according to the manufacturer's instructions for achieving accurate flow to the specifications above, or it shall be installed in a straight length of pipe where there is at least an upstream length equal to ten (10) times the outside pipe diameter and a downstream length equal to two (2) times the outside pipe diameter. Where there is not at least a length of ten diameters upstream available, flow straightening vanes shall be used in the upstream line. Existing systems that would require retrofitting to achieve the above standards will not be required to retrofit provided it is documented on the Flow Meter Accuracy Verification Form, Form No. LEG-R.021.01 (04/09), incorporated by reference in paragraph 40D-2.091(2)(a), F.A.C., that the flow meter is accurately and reliably measuring flow over different flow ranges or for the permanent operating flow. This form can be obtained from the District's website (www.watermatters.org).
3. If a metered withdrawal point, AWS inflow line or re-pump withdrawal point is not utilized during a given month, the meter report shall be submitted to the District showing the same meter reading that was submitted the previous month.
4. Broken or malfunctioning meter:

If the meter or other flow-measuring device malfunctions or breaks, the permittee shall:

    a. Notify the District within 15 days of discovering the malfunction or breakage.
    b. Replace the broken or malfunctioning meter with a repaired or new meter, subject to the specifications given above, within 30 days of the discovery.
    c. Submit estimates of their pumpage as described below.

If the meter is removed from the withdrawal point for any other reason, it shall be replaced with another meter having the same specifications given above, or the meter shall be reinstalled within 30 days of its removal from the withdrawal. In either event, the withdrawal point shall not lack a fully functioning meter for more than 60 consecutive days.

5. While the meter is not functioning correctly, the permittee shall document the total amount of time in minutes that the withdrawal point was used for each month and multiply those minutes times the pump capacity (in gallons per minute) for total gallons. The estimate of the number of gallons used each month during that period shall be submitted on District scanning forms and noted as estimated per instructions on the form. The reason for the necessity to estimate pumpage shall be reported with the estimate.

6. In the event a new meter is installed to replace a broken meter, the meter and its installation shall meet the specifications of this Chapter. The permittee shall notify the District of the replacement with the first submittal of meter readings from the new meter.

Transferred from Chapter 6 on 3-26-09.

Flow Meter Verification.

The following requirements pertain to the required flow meter testing:

1. The Flow Meter Accuracy Verification Form, Form No. LEG-R.021.01 (4/09), incorporated by reference in paragraph 40D-2.091(2)(a), F.A.C., shall be completed and provided to the District for each flow meter tested. This form can be obtained from the District's website (www.watermatters.org). If the test equipment provides a printout of data that was input, this shall be submitted with the worksheet. The equipment's water temperature shall be set to 72° F for ground water, and for other water sources the measured water temperature shall be used.

2. Permittees shall demonstrate that the results of the meter testing are accurate. This demonstration may be met by submitting documentation with the Flow Meter Accuracy Verification Form referenced above under the heading "Flow Meters" that:

   a. The manufacturer of the test equipment, or an entity approved or authorized by the manufacturer, has trained the operator to use the specific model test equipment used for testing.

   b. Includes a date of calibration of the testing equipment within the previous twelve months, and the test lab's National Institute of Standards and Testing traceability reference number.

3. A diagram showing the precise location on the pipe where the testing equipment was mounted shall be supplied with the form. This diagram shall also show the pump, installed meter, the configuration (with all valves, tees, elbows, and any other possible flow disturbing devices) that exists between the pump and the test location clearly noted with measurements. If flow straightening vanes are utilized, their location(s) shall also be included in the diagram.

4. A picture(s) of the test location, including the pump, installed flow meter, and the measuring device, or for sites where the picture does not include all of the items listed above, a picture of the test site with a notation of distances to these items.

5. A minimum of two separate timed tests shall be performed for each meter. Each timed test shall consist of measuring flow using the test meter and the installed meter for a minimum of four minutes duration. If the two tests do not yield consistent results, additional tests shall be performed for a minimum of eight minutes or longer per test until consistent results are obtained. If the installed meter has a rate of flow, or large multiplier that does not allow for consistent results to be obtained with four-or eight-minute tests, the duration of the test shall be increased as necessary to obtain accurate and consistent results with respect to the type of flow meter installed. The results of two consistent tests shall be averaged, and the result will be considered the test result for the meter being tested. This result shall be expressed as a plus or minus percent (rounded to the nearest one-tenth percent) accuracy of the installed meter relative to the test meter. The percent accuracy indicates the deviation (if any), of the meter being tested from the test meter.

6. Flow meters that fail to meet the District's accuracy requirements must be repaired or replaced within 30 days. These meters shall be retested after the repair and the results submitted to the District within 30 days of the test.

7. Flow meters shall be tested in place for accuracy at a minimum of once every five years beginning from the flow meter's date of installation or from the date of initial issuance of the permit containing the metering condition with an accuracy-test requirement for existing meters, unless the permittee demonstrates to the satisfaction of the District that a longer period of time for testing is warranted. Results of the flow meter accuracy testing shall be reported to the District on the Flow Meter Accuracy Verification Form, Form No. LEG-R.021.01 (04/09), and shall be submitted no later than the end of the month indicated below for the county in which the permitted withdrawal facility or a majority of the permitted withdrawal facilities are located:

a. January	Hillsborough.
b. February	Manatee, Pasco.
c. March	Polk – Permits ending in odd base number.
d. April	Polk – Permits ending in even base number.
e. May	Highlands.
f. June	Hardee, Charlotte.
g. September	DeSoto, Sarasota.
h. October	Citrus, Levy, Lake.
i. November	Hernando, Sumter, Marion.
j. December	Pinellas.

New 3-26-09, Revised 6-10-10.

5.2 SALINE WATER MONITORING.

The purpose of saline water monitoring is to ensure that saline water intrusion, whether lateral from a seawater source, vertical from an aquifer containing lower quality water, or a combination of both, does not degrade the aquifer. Saline water monitoring provides a means to establish historical trends in saline water movement. The District can then use that information in evaluating present and future withdrawals and determining when corrective action should be taken if sustained saline water movement is detected. Typically, saline water monitoring may be accomplished by proper sampling of production wells. However, in some cases (e.g., large withdrawals in saline water prone areas), separate monitor wells shall be installed expressly for the purpose of saline water intrusion monitoring. The chemical constituents typically sampled include chloride, sulfate, and total dissolved solids (TDS). Frequency of sampling may be monthly, quarterly, or otherwise, as appropriate.

Permittees shall implement a saline water monitoring program when:

1. The annual average withdrawal is greater than or equal to 500,000 gpd and the withdrawal point is located within the Saline Water Zone, based on the 500 mg/L TDS line for the Floridan aquifer, as shown in Figures 5-1 through 5-3.
2. There is a history of increasing saline water concentrations for either ground water or surface water in the vicinity of the point of withdrawal.
3. The District staff determines that, at projected withdrawal rates, saline water intrusion is likely to occur.
4. The withdrawals are from a ground water source with high saline water concentrations.
5. The District has determined that the permittee's well(s) are potentially at risk to saline water intrusion within the SWUCA.

Figure 5-1 Saline Water Monitoring Zone

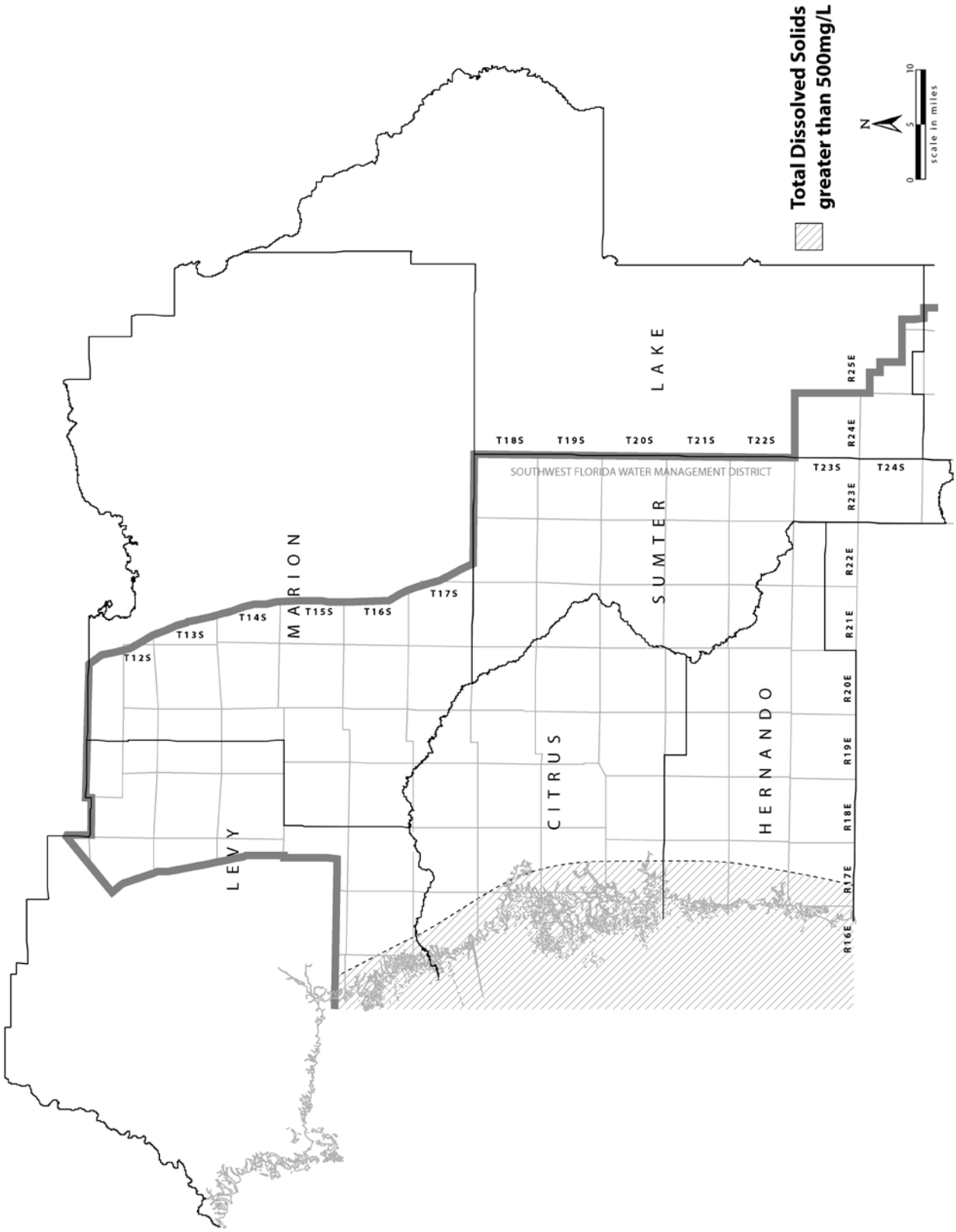


Figure 5-2 Saline Water Monitoring Zone

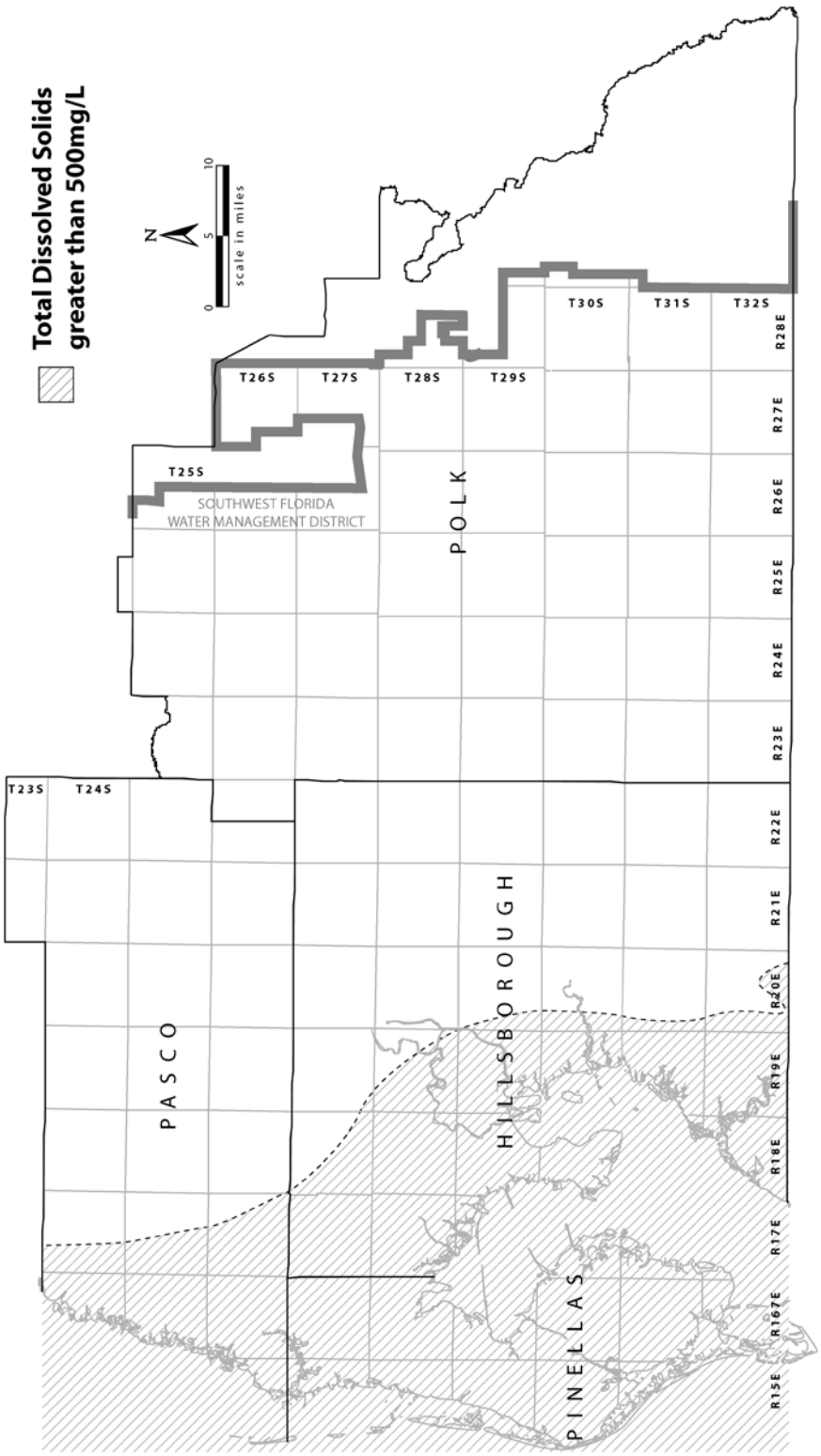
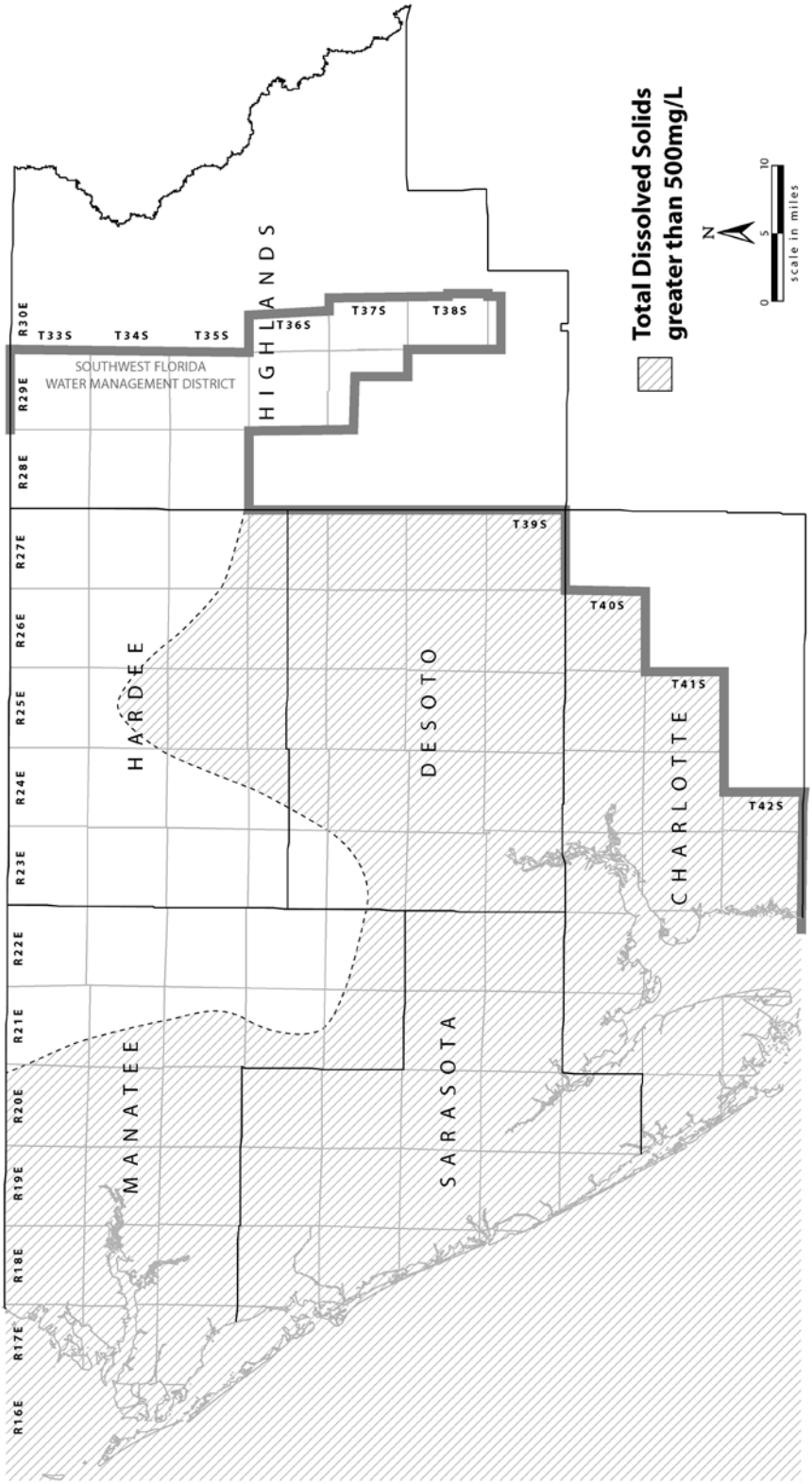


Figure 5-3 Saline Water Monitoring Zone



Revised 1-1-07.

Guidelines for establishing a saline water monitoring program, as well as sampling, sample handling, and analysis guidelines, are described in Part C of this Manual.

5.3 POLLUTION SOURCE MONITORING.

The purpose of pollution source monitoring is to ensure that withdrawals do not cause movement of undesirable constituents that would result in degradation of the water resources to the extent that existing legal users are adversely impacted or the public interest is otherwise detrimentally affected. A permittee may be required to monitor existing wells or install separate monitor wells to evaluate withdrawal effects on movement of pollution.

5.4 GROUND WATER LEVELS.

The purpose of ground water level monitoring is to ensure that existing legal uses, off-site land use, water resources, and associated environmental features are not adversely impacted by withdrawals. A ground water level monitoring program may include water-table levels, potentiometric surface levels, or both.

Permittees may be required to implement a ground water level monitoring program when:

1. Saline water monitoring is required;
2. Pollution source monitoring is required.
3. Environmental monitoring is required;
4. The withdrawal is for the purpose of dewatering activities.
5. Insufficient data exist to define the cone of depression of the withdrawal, and there is reasonable cause to expect adverse impacts to existing legal use, off-site land uses, the water resources, or associated environmental features.
6. In the SWUCA when minimum levels have been established in 40D-8, F.A.C., for the Floridan aquifer when it is the source from which withdrawals are made.

No. 6. New 1-1-03, Revised 1-1-07.

5.5 SURFACE WATER LEVELS AND FLOWS.

Monitoring of surface water levels and flows may be required to ensure that unacceptable adverse impacts to the water resources and associated environmental features do not occur.

Permittees may be required to monitor surface water levels and flows in the following circumstances:

1. For permits involving withdrawals from rivers, streams, or other flowing bodies of water, the permittee may be required to monitor flow rates upstream and/or downstream of the point of withdrawal.
2. For permits involving withdrawals from ground water sources that may impact surface water levels or rates of flow in nearby water bodies, the permittee may be required to monitor surface water levels or flows.
3. For permits involving lake withdrawals, the permittee may be required to monitor lake levels.
4. For permits involving withdrawals that may cause adverse impacts to water-level-dependent vegetation or animal life in wetlands, permittees may be required to monitor surface water levels.
5. For permits involving augmentation, permittees may be required to monitor water levels or flows of the augmented body.

5.6 RAINFALL.

Permittees may be required to monitor rainfall, evaporation, evapotranspiration, or other climatic variables for use in the assessment of the impact of withdrawals on the water resources. The necessity for rainfall monitoring will be determined on a case-by-case basis. Data generally will be recorded on a daily basis and reported to the District monthly.

5.7 SURFACE WATER QUALITY.

Permits involving withdrawals which may cause adverse environmental impacts to surface water bodies, including wetlands, may be required to monitor surface water quality. The specific water quality parameters required to be monitored will depend on the type of water body and may include but are not limited to: temperature, dissolved oxygen, specific conductance, pH, alkalinity, acidity, turbidity, color, suspended solids, nutrients, major cations and anions, and man-made pollutants.

5.8 ENVIRONMENTAL ASSESSMENT AND MONITORING.

Environmental monitoring shall be required for permits with potential for significant adverse impacts to environmental features associated with the water resources of the District. Monitoring to document environmental

impacts may consist of various types of data collection, including but not limited to, ground water and surface water levels, surface water quality, biological parameters, ground and aerial photography, and land cover assessments.

As specified in Section 4.2, the permittee may be required to provide to the District information on the environmental features associated with the project site, including baseline hydrologic and biological data. During the term of the permit, the District may investigate the site or implement its own monitoring program to assess impacts associated with the withdrawal.

The types of data associated with monitoring water-dependent environmental features in the District are described in Part C of this Manual. Details of environmental monitoring programs shall be identified during the application process.

For Mining and Dewatering permits, environmental monitoring will be limited to those environmental features described in Section 4.2. which are affected by mine dewatering or well withdrawals. However, Applicants may be required to monitor selected control sites in unaffected areas and provide comparative hydrologic and environmental data. Typically, monitoring will be required for at least two years prior to dewatering activities in the vicinity of protected wetlands. If the permittee provides reasonable assurance that historical water table elevations will be maintained in the protected area during mining, other environmental monitoring will not be required.

6.0 PERMIT CONDITIONS

Standard Conditions apply in all cases and are automatically placed on all permits. Special Conditions are placed on permits on a case-by-case basis. This Section contains a list of standard conditions and examples of frequently used special conditions that may be imposed when appropriate.

6.1 STANDARD PERMIT CONDITIONS.

The following conditions are placed on all Water Use Permits:

1. If any of the statements in the application and in the supporting data are found to be untrue and inaccurate, or if the permittee fails to comply with all of the provisions of Chapter 373, F.S., Chapter 40D, F.A.C., or the conditions set forth herein, the Governing Board shall revoke this permit in accordance with Rule 40D-2.341, F.A.C., following notice and hearing.
2. This permit is issued based on information provided by the permittee demonstrating that the use of water is reasonable and beneficial, consistent with the public interest, and will not interfere with any existing legal use of water. If, during the term of the permit, it is determined by the District that the use is not reasonable and beneficial, in the public interest, or does impact an existing legal use of water, the Governing Board shall modify this permit or shall revoke this permit following notice and hearing.
3. The permittee shall not deviate from any of the terms or conditions of this permit without written approval by the District.
4. In the event the District declares that a Water Shortage exists pursuant to Chapter 40D-21, F.A.C., the District shall alter, modify, or declare inactive all or parts of this permit as necessary to address the water shortage.
5. The District shall collect water samples from any withdrawal point listed in the permit or shall require the permittee to submit water samples when the District determines there is a potential for adverse impacts to water quality.
6. The permittee shall provide access to an authorized District representative to enter the property at any reasonable time to inspect the facility and make environmental or hydrologic assessments. The permittee shall either accompany District staff onto the property or make provision for access onto the property.
7. Issuance of this permit does not exempt the permittee from any other District permitting requirements.
8. The permittee shall cease or reduce surface water withdrawal as directed by the District if water levels in lakes fall below applicable minimum water level established in Chapter 40D-8, F.A.C., or rates of flow in streams fall below the minimum levels established in Chapter 40D-8, F.A.C.
9. The permittee shall cease or reduce withdrawal as directed by the District if water levels in aquifers fall below the minimum levels established by the Governing Board.
10. The permittee shall practice water conservation to increase the efficiency of transport, application, and use, as well as to decrease waste and to minimize runoff from the property. At such time as the Governing Board adopts specific conservation requirements for the permittee's water use classification, this permit shall be subject to those requirements upon notice and after a reasonable period for compliance.
11. The District may establish special regulations for Water-Use Caution Areas. At such time as the Governing Board adopts such provisions, this permit shall be subject to them upon notice and after a reasonable period for compliance.
12. The permittee shall mitigate, to the satisfaction of the District, any adverse impact to existing legal uses caused by withdrawals. When adverse impacts occur or are imminent, the District shall require the permittee to mitigate the impacts. Adverse impacts include:
    a. A reduction in water levels which impairs the ability of a well to produce water.
    b. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams or other watercourses.
    c. Significant inducement of natural or manmade contaminants into a water supply or into a usable portion of an aquifer or water body.
13. The permittee shall mitigate to the satisfaction of the District any adverse impact to environmental features or off-site land uses as a result of withdrawals. When adverse impacts occur or are imminent, the District shall require the permittee to mitigate the impacts. Examples of adverse impacts include the following:
    a. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams, or other watercourses.
    b. Damage to crops and other vegetation causing financial harm to the owner.
    c. Damage to the habitat of endangered or threatened species.

14. When necessary to analyze impacts to the water resource or existing users, the District shall require the permittee to install flow metering or other measuring devices to record withdrawal quantities and submit the data to the District.

15. A District identification tag shall be prominently displayed at each withdrawal point that is required by the District to be metered or for which withdrawals quantities are required to be reported to the District, by permanently affixing the tag to the withdrawal facility.

16. The permittee shall notify the District within 30 days of the sale or conveyance of the permitted water withdrawal facilities or the land on which the facilities are located. Where a permit has been issued to a party whose ownership or legal control of the permitted water withdrawal facilities subsequently terminates, the party subsequently controlling the permitted water withdrawal facilities may apply to transfer the permit to himself or herself up to the renewal date of the transferor's permit notwithstanding the provisions of Chapter 40D-0.381(1), F.A.C. The District will transfer the permit provided the source, use and withdrawal quantities remain the same. All terms and conditions of the permit shall become binding on the transferee.

17. All permits issued pursuant to these Rules are contingent upon continued ownership or legal control of all property on which pumps, wells, diversions or other water withdrawal facilities are located.

18. In addition to the standard terms and conditions listed previously, the District shall impose special conditions as set forth in the "Basis of Review For Water Use Permit Applications," identified in Rule 40D-2.091, F.A.C., or other special conditions appropriate to any specific project.

19. Within the SWUCA, if the District determines that significant water quantity or quality changes, impacts to existing legal uses, or adverse environmental impacts are occurring, the permittee shall be provided with a statement of facts upon which the District based its determination and an opportunity to address the change or impact prior to a reconsideration by the Board of the quantities permitted or other conditions of the permit.

No. 19. New 1-1-03, Revised 1-1-07, 7-20-08, no. 13 revised – 6-16-11.

6.2 SPECIAL PERMIT CONDITIONS.

This section describes Special Conditions which are routinely added to the Standard Conditions, when necessary. Other Special Conditions may be developed specifically to fit a given situation. A discussion of the typical applications of the condition follows each permit condition's wording. The condition language and presented in this section are intended only as examples; both the language and the application of any of the permit conditions listed may be modified by the District when appropriate.

This section describes Special Conditions in each of the following areas:

1. Reporting requirements and procedures.
2. Pumpage reporting.
3. Water-quality monitoring.
4. Water levels, flows, and rainfall monitoring
5. Reporting.
6. Unused wells.
7. Environmental monitoring.
8. Water conservation.

REPORTING REQUIREMENTS AND PROCEDURES.

1. Submitting Data.

Condition: All reports of data required by the permit shall be submitted to the District on or before the tenth day of each month and shall be addressed to:

Permits Data
Southwest Florida Water Management District
2379 Broad Street
Brooksville, Florida 34609-6899

Discussion: This condition is included on all permits with data reporting requirements such as pumpage, water quality, mitigation, water level, environmental monitoring, and any other reports.

2. Submitting Reports.

Condition: Each report required by the permit shall be provided to the Director, Resource Regulation Department, by the permittee.

Discussion: This condition is used whenever reports, other than data, are required in a permit. This condition includes annual or quarterly reports, description of monitoring and mitigation plans, plans to reduce off-site

discharge, investigation of reuse, investigation of complaints, water quality control and assurance program, and sampling and analysis procedures.

3. Investigating Reuse.

Condition: The permittee shall investigate the feasibility of using sewage effluent as a water source for irrigation and submit a report describing the feasibility to the District by (date specified). The report shall contain an analysis of effluent sources in the area, the relative location of these sources to the permittee's property, the quantity of effluent available, the costs associated with obtaining the effluent, and an implementation schedule, if feasible. If the use of sewage effluent is determined infeasible, a detailed explanation for this finding must be submitted.

Discussion: This condition is used whenever wastewater reuse may be a possible alternative source of supply. This condition is applied particularly to golf course and lawn/turf irrigation applications.

4. Investigating Complaints.

Condition: The permittee shall investigate complaints related to withdrawals. This condition shall be an ongoing effort for the duration of the permit. All complainants will make an application to the permittee and must receive an investigative report, including any action to be taken within a reasonable time by the permittee. The permittee shall file a report of the complaint, the findings of facts, and any mitigating action taken or to be taken by the permittee, to the Director, Resource Regulation Department, for review and approval within 15 days of the receipt of any complaint. The report shall include:

a. The name and address of each complainant.
b. The date and nature of the complaint.
c. A summary of the permittee's investigation.
d. A summary of the permittee's determination, including details of any mitigation activities.
e. Cost of mitigation activity for each complaint.

Discussion: This condition is used whenever it appears that a permittee's withdrawals may have an adverse impact on nearby existing legal withdrawals or land uses.

5. Interim Report for Withdrawal Impacts.

Condition: The permittee shall prepare a comprehensive and concise interim report describing the operation of the withdrawal facilities and an assessment of the water resources and environmental systems for the period _____. The report shall summarize the data collected during the previous period and shall provide conclusions concerning the interactions of the elements monitored including pumpage, water levels, environmental systems and water quality. The report shall be supported with appropriate graphs and tables. The permittee shall provide statistical analysis addressing the interactions of the elements monitored, including the effects of rainfall and pumpage on:

a. Movement of the fresh/saltwater interface.
b. Surficial water levels.
c. The Floridan aquifer potentiometric surface.
d. Lake levels.
e. Stream discharge, and
f. Wetlands vegetation.

The report shall contain a summary of recommended changes to the monitoring program. The specific elements to be addressed in the report include:

a. Pumpage.
b. Water quality.
c. Environmental systems.
d. Water conservation measures employed.
e. Facility management plan.
f. Movement of fresh/saline water interface.
g. Surficial aquifer water levels.
h. Floridan aquifer potentiometric surface.
i. Lake levels.
j. Stream discharge,
k. Wetlands vegetation and animal populations,
l. Water demands,
m. Other relevant reports or information.

Discussion: This condition is typically applied to large, complex permits and permits in hydrologically or environmentally sensitive areas, where there are many items monitored and reported, which should be analyzed on an annual basis.

PUMPAGE REPORTING.

6. Flow Meters.

Condition: The permittee shall meter withdrawals from surface waters and/or the ground water resources, and meter readings from each withdrawal facility shall be recorded on a monthly basis within the last week of the month. The meter reading(s) shall be reported to the Permit Data Section, Regulation Performance Management Department on or before the tenth day of the following month. District-supplied scanning forms shall be used to submit the meter readings, unless another arrangement for submission of this data has been approved in writing by the District. The following withdrawal facilities shall be metered:

a. Standby withdrawal facilities (those that provide back-up water for another withdrawal point in the event the other withdrawal point becomes unusable), District ID No(s). [Specify District ID No(s).], Permittee ID No(s). [Specify Permittee ID No(s).] before using standby quantities.

b. Standby withdrawal facilities (those that are on standby as backup for AWS), District ID No(s). [Specify District ID No(s).], Permittee ID No(s). [Specify Permittee ID No(s).], shall be metered upon permit issuance.

c. Withdrawal facilities that are not yet constructed, District ID No(s). [Specify District ID No(s).], Permittee ID No(s). [Specify Permittee ID No(s).] shall be metered within 90 days of completion of construction of the withdrawal facility.

d. Existing permitted withdrawal facilities shall continue to be metered, District ID No(s). [Specify District ID No(s).], Permittee ID No(s). [Specify Permittee ID No(s).].

e. Previously un-metered existing withdrawal facilities, District ID No(s). [Specify District ID No(s).], Permittee ID No(s). [Specify Permittee ID No(s).] shall be metered upon permit issuance.

1-1-03, Revised 1-1-07, 3-26-09.

The meters shall adhere to the following descriptions and shall be installed or maintained as follows:

1. The meter(s) shall be non-resettable, totalizing flow meter(s) which have a totalizer of sufficient magnitude to retain total gallon data for a minimum of the three highest consecutive months permitted quantities. Approval shall be obtained in writing from the Regulation Department Director. If other measuring device(s) are proposed, the permittee shall submit documentation that the other measuring devices or accounting methods meet the stipulations listed in this condition, prior to installation. Approval for other measuring devices or accounting methods shall be obtained in writing from the Regulation Department Director.

2. The flow meter(s) or other approved device(s) shall have and maintain an accuracy within 5% of the actual flow as installed.

3. The flow meter-water piping system shall be designed for inline field access for meter accuracy testing. The meter shall be tested for accuracy on-site, as installed, every five years beginning from the date of its installation for new meters or from the date of initial issuance of this permit containing the metering condition with an accuracy-test requirement for existing meters unless the permittee demonstrates to the satisfaction of the District that a longer period of time for testing is warranted. The test shall be performed by a person certified in the test equipment used. If the actual flow is found to be greater than 5% different from the measured flow, within 30 days, the permittee shall have the meter re-calibrated, repaired, or replaced, whichever is necessary. Documentation of the test and a certificate of re-calibration, if applicable, shall be submitted within 30 days of each test or re-calibration.

4. The meter shall be installed according to the manufacturer's instructions for achieving accurate flow to the specifications above, or it shall be installed in a straight length of pipe where there is at least an upstream length equal to ten (10) times the outside pipe diameter and a downstream length equal to two (2) times the outside pipe diameter. Where there is not at least a length of ten diameters upstream available, flow straightening vanes shall be used in the line.

5. If the meter or other flow measuring device malfunctions or breaks, the permittee shall notify the District within 15 days of discovering the malfunction or breakage and replace it with a repaired or new meter, subject to the same specifications given above, within 30 days of the discovery. If the meter is removed from the withdrawal for any other reason, it shall be replaced with another meter having the same specifications given above, or the meter shall be reinstalled within 30 days of its removal from the withdrawal. In either event, a fully functioning meter shall not be off the withdrawal point for more than 60 consecutive days.

6. While the meter is off the withdrawal, the permittee shall estimate their use by multiplying the number of hours the withdrawal point was used during that month times the flow capacity of the pump or mainline, whichever

is appropriate, or the permittee may request instructions on how to estimate use from the Permit Data Section. The estimate of the number of gallons used each month during that period shall be noted as an estimate when it is submitted to the District.

7. In the event a new meter is installed to replace a broken meter, it and its installation shall meet the specifications of this condition. The permittee shall notify the District of the replacement with the first submittal of meter readings from the new meter.

1-1-03, Revised 1-1-07.

Discussion: Only the set of paragraphs numbered 1.-7. above shall be applied to permits within the Dover/Plant City WUCA as described in Section 7.4 of the WUP Basis of Review.

New 6-16-11.

WATER-QUALITY MONITORING.

7. Water-Quality Monitoring.

Condition: Reports of the analyses shall be submitted to the District (using District forms) on or before the tenth day of the following month. The parameters and frequency of sampling and analysis may be modified by District staff as necessary to ensure the protection of the resource. Water quality samples shall be collected and analyzed, for the specified withdrawal point, parameter, and frequency.

District ID No.	Parameter	Sampling Frequency

Analyses shall be performed according to procedures outlined in the current edition of Standard Methods for the Examination of Water and Wastewater by the American Public Health Association-American Water Works Association-Water Pollution Control Federation (APHA-AWWA-WPCF) or Methods for Chemical Analyses of Water and Wastes by the EPA.

Discussion: This condition is used in situations such as those addressed in Sections 5.2, 5.3, and 5.7.

8. Report Water Quality Sampling Procedures.

Condition: The permittee shall submit a report describing the sampling and analytical methodologies employed. The report shall address all parameters for which analyses are performed. The report shall be included with the first data submitted after the date the permit is granted and upon any change in sampling and/or analytical methodology.

Discussion: This condition is used in conjunction with Condition No. 10 to ensure that representative samples are taken and that acceptable analytical methods are used.

9. Saline Water Monitor Well.

Condition: The permittee shall install a saline water monitor well(s) at (approximate location). This well shall be designed to monitor the movement of saline water. Within 90 days after the issue date of the permit, the permittee shall submit a proposal including site location and well design for approval by the Director, Resource Regulation Department. Within 6 months after the issue date of the permit, the permittee shall complete construction of the well, install all necessary monitoring equipment, and begin required monitoring of the well, District Withdrawal No. ___ (proposed), in accordance with Water Quality Sampling, Analysis, and Reporting Conditions __.

Discussion: This condition is used in situations such as those addressed in Section 5.2.

WATER LEVELS, FLOWS, AND RAINFALL MONITORING.

10. Reporting Lake Levels.

Condition: The permittee shall report weekly lake levels from the District-approved staff gauge located (latitude-longitude) of Lake _____ to the District on a monthly basis.

Discussion: This condition is applied for situations described in Sections 5.5 and 5.8.

11. Comply With Minimum Lake Levels.

Condition: The permittee shall comply with the minimum water levels established for Lake _____ as set forth in Chapter 40D-8, F.A.C., and posted on the District staff gauge in the lake. If the level of any lake falls below the applicable minimum water level, the permittee shall cease or reduce withdrawals from the lake as directed by the District. If the lake does not have adopted management levels, a minimum level may be determined by the District staff during the evaluation, below which withdrawals shall cease or be reduced.

Discussion: This condition is placed on certain permits for direct withdrawals from lakes. Based on the size of the withdrawal and water level conditions in the lake, either the low management level or the extreme low management level is selected as the regulatory minimum water level.

REPORTING.

12. Reporting Wetland Levels.

Condition: The permittee shall report weekly wetland water levels from the District-approved gauge located at (latitude-longitude) to the District on a monthly basis.

Discussion: This condition is used in situations such as those addressed in Section 5.5 and 5.8.

13. Reporting Stream Stage Levels.

Condition: The permittee shall report daily stream stage measurements from the District approved gauge located at (latitude-longitude) on (name of stream) to the District on a monthly basis.

Discussion: This condition is used in situations such as those addressed in Section 5.5 and 5.8.

14. Reporting Stream Flow.

Condition: The permittee shall calculate and report daily flow rates based upon measurements from the District-approved gauge located at (latitude-longitude) on (stream name) and the District-approved rating curves on a monthly basis.

Discussion: This condition is used in situations such as those addressed in Section 5.5 and 5.8.

15. Comply with Minimum Stream Flows.

Condition: The permittee shall comply with the minimum rate of stream flow as set forth in Chapter 40D-8, F.A.C., for (name of stream) and based upon measurements from the District-approved gauge at (latitude-longitude) and District-approved rating curves. The permittee shall cease all withdrawals from the stream when daily flow falls below the minimum flow level.

Discussion: This condition applies to all streams and watercourses for which minimum rates of flow are set forth in Chapter 40D-8, F.A.C.

16. Ground Water Level Monitoring.

Condition: The permittee shall monitor water levels in the _____ (specified) aquifer(s). Reports of the data shall be submitted to the District, in a form acceptable to the District. All data shall be referenced to National Geodetic Vertical Datum (NGVD) 1929 or North American Vertical Datum (NAVD) 1988 as determined by the District. The frequency of water-level recording may be modified by the Director, Resource Regulation Department, as necessary to ensure the protection of the resource. Water levels in the wells shall be recorded for the specified District ID No., aquifer, and recording frequency.

District ID No.	Aquifer	Recording Frequency

Water levels shall be recorded on a continuous hourly basis for those wells with a continuous recording frequency and on the same day of each week for those wells with a weekly recording frequency. The average of the 24-hour values (continuous recording) for each day shall be calculated, and only the average value for each day shall be reported to the District. The time and date that the water level is measured shall be reported with the data.

Discussion: This condition is used in situations such as those addressed in Section 5.4. The location(s) of each monitoring point is linked to the District I.D. No. by latitude-longitude.
Revised 10-26-09.

17. Rainfall and Evaporation Monitoring.

Condition: Within 90 days after the issue date of the permit, the permittee shall install and maintain a continuous recording rain gauge and an evaporation pan in the area around (location specified) or (District

Withdrawal No. _____). Total daily rainfall and daily evaporation shall be recorded at this station and submitted to the District, in a form acceptable to the District. The period of record for these data shall begin and end on the last day of each month.

Discussion: This condition is used in situations such as those addressed in Section 5.6.

UNUSED WELLS.

18. Temporary Capping of Wells Not in Use.

Condition: Any wells not in use (including well ID Nos. _____) and in which pumping equipment is not installed shall be capped or valved in a water-tight manner in accordance with Rule 17-21.10(3), F.A.C.

Discussion: This condition is applied to any permit that involves wells that are inactive and do not have pumping equipment installed, but on which pumping equipment is expected to be used in the future. This situation often occurs when crops and their irrigation wells are rotated on a seasonal or other basis. If a specific well is intended to be subject to this condition but this well is not expected to be used during the term of the permit, the well ID number(s) may be inserted into the condition.

19. Permanently Plugging Abandoned Wells.

Condition: Within _____ days from the issue date of this permit, District Withdrawal Nos. _____ shall be properly abandoned (plugged) by a licensed water well contractor in accordance with Chapter 17-21.10(4), F.A.C., under a Well Abandonment Permit issued by the District, unless an extension of time is granted by the Director, Resource Regulation Department.

Discussion: This condition is used whenever a well is determined to be unusable or when no use is intended. The normal amount of time to allow for abandonment is 120 days. If the permit is for a location in Manatee or Sarasota County, the county name will be substituted for the District as the issuing authority for the Well Abandonment Permit.

20. Disposition of Retired Wells.

Condition: Within 120 days after the issue date of this permit, the permittee shall submit a letter report to the District for approval by the Director, Resource Regulation Department. The letter report will summarize the schedule for retiring (taking well out as main production source) District Withdrawal Nos. _____ through _____. This tentative schedule shall represent the permittee's future plans for these wells. For each well referenced, the report shall include:

a. Proposed date of retirement.
b. Proposed action to be taken.
c. Reasons for proposed action, and
d. Proposed completion date of action to be taken.

Modifications to this schedule shall be reported to the Director, Resource Regulation Department, in writing as they occur. The modified schedule and action must be approved by the Director, Resource Regulation Department. Full consideration shall be given to maintaining each well as a standby or monitor well. No well shall be abandoned without proper permits. Should the retired well not be converted to a standby or monitor well by the permittee, consideration shall be given to potential uses by area agencies, which may include but are not limited to the District, USGS, and DER. Any action taken on retired wells during the annual reporting period shall be summarized in the annual report, as described in Condition _____.

Discussion: This condition is used whenever an application includes wells to be taken out of service. This situation generally occurs for public supply wellfields and mining operations, where wells are located on tracts to be mined.

ENVIRONMENTAL MONITORING.

21. Environmental Monitoring.

Condition:

a. Permittee shall maintain data collection programs to monitor vegetational transects, tree plots, water-table piezometers, and fish and wildlife as outlined in the environmental monitoring plan throughout the term of the permit. Any changes to the methodology or frequency of monitoring for any of these data collection programs can be done only after approval by the Director, Resource Regulation Department.

b. The Permittee shall incorporate the data gathered into an annual report. The annual report shall include an assessment of impacts of pumpage on the areas surrounding the property within _____ (distance specified). Additionally, the report shall include an analysis of upland and wetland conditions, including

interpretation of applicable parameters such as treefalls per unit area, rate of soil subsidence, effects on fish and wildlife, and evidence of vegetational succession. Data shall be obtained through field measurements and aerial photo-interpretation. Hydrographs from surface water gauges and wells shall be included for the period of record and discussed in the report. Any mitigation activities will be noted along with specific mention of sites receiving past or present water augmentation.

c. The report shall be submitted to the District by _____ covering the preceding monitoring period.

Discussion: This condition is used when extensive environmental monitoring is required, such as when withdrawals potentially impact wetlands.

22. Environmental Mitigation Plan.

Condition: By (date specified), the permittee shall submit to the District a plan to mitigate any adverse environmental impacts associated with pumpage. Within 1 year of issuance of this permit, the permittee shall implement the appropriate provisions of the plan. The plan shall include a proposal for mitigating adverse environmental impacts due to pumpage.

Discussion: This condition may be used whenever the potential exists for environmental impacts. Normally, monitoring and mitigation plans will be required prior to permitting; however, if this is not possible, the Applicant may be required to provide the information as a condition of the permit.

23. Mapping Requirements.

Condition: The permittee shall obtain aerial 1" = 2,000' scale, color infrared photography of the area of withdrawals and adjacent 1-mile surrounding area. The photography shall be taken semi-annually, in May and September, and shall be delivered to the District within 90 days.

Discussion: This condition is used when potentially impacted wetland areas exist within the cone of depression of the permittee's withdrawals and when long-term environmental monitoring will be aided by aerial photography. The scale and frequency of mapping required may be changed, as appropriate.

24. Sinkhole Monitoring.

Condition: The permittee shall monitor, investigate, and catalog the development of sinkholes within (specified distance) from the property contained in the application.

Discussion: This condition is used for large withdrawals in sinkhole-prone areas.

CENTRAL FLORIDA COORDINATION AREA.

25. Special Conditions.

In addition to the general, standard and other conditions, permits for applicants specified in 40D-2.801(3)(c)4., F.A.C., authorizing groundwater withdrawals in the CFCA shall include special conditions that address the following.

a. Implementation of a District-approved plan to monitor hydrology, ecology and water quality in the areas subject to impacts from the permitted withdrawals, with at least annual data reporting and analysis.

b. Implementation of specific District-approved measures to mitigate or avoid harm that would otherwise occur as a result of the permitted allocation.

c. Implementation of District-approved mitigation or avoidance actions to address any unanticipated harm, if the District finds that harm will occur or has occurred as a result of the permitted allocation.

d. Expeditious development and use of Supplemental Water Supply to meet water demands in an expeditious manner as described in paragraph B.2. under the heading Requirements For Applicants For Groundwater Withdrawals Within The Central Florida Coordination Area in Section 3.6. of Part B, Basis of Review, of the Water Use Permit Information Manual.

e. Submittal of five-year compliance reports as described in subsection 373.236(4), F.S., for 20-year duration permits.

f. The reduction in allocation or other modification of the permit, after review of each five-year compliance report or at any other time during the term of the permit, if needed to abate observed or projected harmful impacts as a result of the permitted use, unless the harmful impacts can be mitigated by the permittee. The permittee shall be provided with notice and an opportunity for a hearing under Chapter 120, F.S., if the District makes such a reduction or other modification.

New 2-13-08, Amended 12-12-11.

6.3 MINING PERMIT CONDITIONS.

1. Sealing Water Wells.

Condition: The permittee may install and operate new sealing water wells without modification of the permit provided that the total quantities permitted are not exceeded. However, a sealing water well proposed to be constructed within 660 ft of the permittee's property boundary must have prior approval of District staff.

a. The following information shall be submitted for each new sealing water well:

(1) Owner ID.

(2) Estimated pumpage.

(3) Latitude and longitude.

(4) Well shall be located on a USGS quad map, or copy of same with a reference to nearest property boundaries.

b. Wells located between the property boundary and the setback distance referenced previously shall be required to have the flow monitored by a flow meter or other monitoring device. Wells located interior to the setback distance shall report flow by flow meter, elapsed-time device, or a calculation using the pump capacity multiplied by the hours of operation. Total flow and the number and location of each sealing water well in use shall be submitted on a monthly basis and reported to the District (using District forms).

Discussion: This condition applies to mining permits involving the use of sealing wells along slurry lines that run from the place of mining to the processing facility.

2. Well Plugging Prior To Mining.

Condition: At least 1 month prior to mining an area in which wells exist, the permittee shall notify the District. Such wells shall be properly abandoned (plugged) by a licensed water well contractor in accordance with Chapter 17-21, F.A.C., under a Well Abandonment Permit issued by the District.

Discussion: This condition applies to any mining permits where wells are located in areas to be mined.

3. Dewatering Setbacks.

Condition: Prior to dewatering within ___ ft of a property boundary, the permittee shall comply with one of the following alternatives.

a. Secure written consent from all adjacent property users for lowering the water table below their lands. The consent shall be submitted in writing to the Director, Resource Regulation Department, prior to opening mining pits within the specified distance.

b. Implement a procedure to mitigate impacts by maintaining the water table at the property boundary at historic levels. This procedure must be approved by the Director, Resource Regulation Department, and shall include the following:

(1) A water table monitoring network, approved by the Director, Resource Regulation Department, designed to insure that adverse impacts do not occur.

(2) Collection of water table water level data after construction of the approved monitor well network for at least 6 months prior to the initiation of mining in the area, to obtain background data. During this time period, water level data shall be recorded on a weekly basis and submitted monthly.

(3) If a rim-ditch system is proposed to recharge the water table near the property boundary, design and operation details must be submitted to demonstrate that the water table will be maintained at appropriate levels based on the background data collected. Rim-ditch systems must also be accompanied by a monitor well network to verify water table maintenance.

(4) At least 1 month prior to the anticipated date of mining an area within the setback distance, water level data shall be recorded on a weekly basis and submitted weekly.

(5) The District staff may decrease or increase the required setback for the site-specific study area based upon water-table impacts determined from monitor well data. If approval of mining within the setback distance in the site-specific study area is granted, mining will be allowed up to the newly prescribed setback distance, indicated by the District, only within the site-specific study area. If such approval is granted, water-level data shall continue to be recorded and reported weekly.

(6) Data collection shall continue for 6 months following completion of mining and reclamation or until District staff determine that background or steady-state levels are attained. During this time period, water-level data shall be recorded on a weekly basis and reported monthly. Water levels shall be reported in feet relative to the NGVD 29 or NAVD 88 as determined by the District.

Revised 10-26-09.

Discussion: This condition applies to dewatering permits, including phosphate pit dewatering, as well as rock, shell, and sand mine-dewatering. The extent of the setback is dependent on site-specific hydrogeologic information supplied by the applicant. If necessary, this condition may be modified to accommodate multiple setbacks for different portions of the property if the hydrogeologic information indicates this setback is warranted. The design information specified in Item 3 must include ditch elevations, both top and bottom, water level elevation, and slope information. This information must be compared with background water table levels to ensure that the proper water level will be maintained.

4. Complaints From Dewatering.

Condition: The permittee shall investigate complaints from adjacent property owners related to dewatering. This investigation shall be an ongoing effort for the life of the permit. All complainants will make application to the permittee and must receive an investigative report from the permittee, including any action to be taken within a reasonable time by the permittee. The permittee shall file a report of the complaint, the findings of fact, and any mitigating action taken or to be taken by the permittee to the Director of Resource Regulation Department, for review and approval within 15 days of the receipt of any complaint. The report shall include all of the following information:

a. The name and address of each complainant.
b. The date and nature of the complaint.
c. A summary of the permittee's investigation.
d. A summary of the permittee's determination including details on any mitigation activities.
e. Cost of mitigation activity for each complaint.

Discussion: This condition applies to any permits where the water table will be lowered at the property boundary because of dewatering.

5. Recharge Well Water Quality Monitoring.

Condition: Water quality analysis and flow measurements will be performed on the water moving into the Floridan aquifer through the system of recharge wells. Twenty percent (20%) of the wells shall be sampled for flow and quality each month. All wells shall have been sampled at the end of each 6-month period.

The water quality analysis will include, but is not limited to the following constituents:

a.	Total coliform count	h.	Organic carbon
b.	Fecal coliform count	i.	Specific conductance
c.	Gross alpha radiation (if greater than 15 pCi/liter-analyze for radium 226, total radium)	j.	Nitrate (NO3 + NO2 as Nitrogen)
		k.	Phosphates (ortho, total)
d.	Iron (FE+3)	l.	Total dissolved solids
e.	Fluoride (F-)	m.	Total suspended solids
f.	Sulfate (SO4=)	n.	Turbidity
g.	Pesticides		

The sampling procedure and list of constituents may be modified by District staff when deemed necessary to monitor the conditions of the water resources of the area. At least quarterly, the analysis shall be performed by an independent testing laboratory. A written report of the analytical results shall be forwarded to the District's Data Collection Section by the tenth day of the following month.

Discussion: This condition applies to permits with recharge, or connector wells, which dewater the surficial aquifer and recharge artesian aquifers. Note that recharge wells are regulated by the DER under Chapter 17-28, F.A.C.

6. Mining Plan.

Condition: The permittee shall submit an annual mining plan by _____ of each year. This plan shall delineate:

a. Areas to be mined or dewatered within the coming year as well as those mined in the previous year.

An approximate time frame in months shall be included for each mining and dewatering cell.

b. Areas where the permittee intends to mine within the setback distance, subject to the limitations of Condition __, shall also be delineated, with an approximate time frame in months for these areas included.

c. Outparcels, labeled with the names and addresses of the property owners.

d. Any wells that will be abandoned because of mining.

e. Wetlands required to be preserved or created and any on-site wetlands that will not be mined.

f. Changes to mining plans may be made more frequently than once each year by filing revised plans with the District as needed.

Discussion: This condition is placed on all mining or dewatering permits.

7. Phosphate Mine Pit Dewatering.

Condition: Total withdrawal from active mining pits shall be measured using either direct or indirect methods and recorded on a monthly basis. The quantity shall be reported to the District (using District forms) on or before the tenth of the following month.

Discussion: This condition is placed on phosphate mining permits to allow the use of indirect flow measuring methods. The use of indirect methods may be necessary because of the itinerant nature of the surface withdrawals, and the high solids content of the water which could cause flow meters to degrade.

6.4 AGRICULTURAL PERMIT CONDITIONS.

Conditions:

1. Measuring Off-site Discharge.

Condition: Within (time specified) from the issue date of this permit, the permittee shall implement methods approved by District staff for measuring off-site flow at all discharge locations on the property. The purpose of measuring off-site discharge is to determine the amount of surface water runoff that is occurring due to the irrigation system. Compliance with this condition includes the following:

a. The permittee shall submit a plan, within 90 days from the issue date of the permit, describing how total off-site discharge will be measured.

b. If applicable, the permittee shall apply for an ERP (Chapter 40D-4, F.A.C.) within 30 days following approval of the plan described in Item a.

c. The permittee shall install the flow measuring device(s) within 6 months following either approval of the ERP or a letter exempting the project from permitting requirements.

Total discharge from the permittee's property shall be recorded on a monthly basis and reported to the District (using District forms) on or before the tenth day of the following month.
Revised 4-27-10.

2. Reduced Off-Site Discharge.

The permittee shall investigate the feasibility of reducing off-site discharge as a water conservation measure. A report on the feasibility of reducing off-site discharge shall be submitted on or before (date specified). This report shall include: (a) the concept of recovering and reusing water that would otherwise be discharged off site, (b) operation and management improvements to reduce the quantity of water pumped or discharged, and (c) economic factors that are associated with discharge reduction. If it is determined to be feasible, an implementation plan must be submitted to the District. If the reduction of off-site discharge is determined unfeasible by the permittee, a detailed explanation (including a cost-benefit analysis) must be submitted.

Discussion: These conditions are used when an agricultural permittee uses an irrigation method that results in significant excess runoff.

Water Conservation.

3. The permittee shall submit progress reports [insert date(s)] according to the District-approved Water Conservation Plan submitted with the application.

Discussion: The above condition is required for all Agricultural Water Use Permits for 100,000 gpd or greater standard annual average daily water demand for Agricultural Water Use Permits.

4. The permittee shall agree to implement all water conservation measures that are economically, technically, and environmentally feasible, including:

a. Incorporation of water conservation practices.

b. Limiting daytime irrigation to the greatest extent practicable to reduce water losses.

c. Implementation of a leak detection and repair program as part of an ongoing system maintenance program. This program shall include a system-wide inspection at least once per season.

d. Evaluation of the feasibility of improving the efficiency of the current irrigation system or converting to a more efficient system. This includes implementation of the improvement(s) or conversion when determined to be operationally and economically feasible.

e. Implementation of an irrigation schedule that maximizes the efficiency of delivering the correct quantity of water to the root zone at the time it is needed. This practice shall include the use of tools to determine when and how much irrigation water is needed. Examples of these tools include soil moisture sensors, weather/climatic measuring devices, or piezometers to monitor the water table elevation.

Discussion: The above condition is required to be applied to all Small General Agricultural Water Use Permits that are not for aquaculture.

5. Utilize other conservation practices as identified by the University of Florida's Institute of Food and Agricultural Science's Department of Fisheries and Aquatic Sciences publication "Regulations Pertaining to Non-native Fish in Florida Aquaculture (FA121)."

Discussion: The above condition is required to be applied to all Small General Agricultural Water Use Permits that are for aquaculture.

Revised 4-27-10.

6.5 SWUCA PERMIT CONDITIONS.

Notice of Recovery Strategy.

Condition: This Permit is located within the SWUCA. Pursuant to Section 373.0421, F.S., the SWUCA is subject to a minimum flows and levels recovery strategy, which became effective on January 1, 2007. As set forth in rule 40D-80.074(5), F.A.C., the recovery strategy, including water use permitting rules, are subject to change based on, among other criteria, the Governing Board's annual assessment of water resource criteria, cumulative water withdrawal impacts, and on a recurring five-year evaluation of the status of the recovery strategy up to the year 2025 as described in Chapter 40D-80, F.A.C. This Permit is subject to modification to comply with new rules.

Discussion: The above condition is required to be applied to all permits located in the SWUCA.

Revised 4-27-10.

6.6 ALTERNATIVE WATER SUPPLIES.

The following conditions shall be applied to permits for 100,000 gpd or greater standard annual average daily water demand, as applicable.

1. Metering Alternative Water Supplies.

Condition: The permittee shall meter, record, and report all alternative water supply (AWS) quantities received, self-generated and used from each alternative water supply inflow line (line coming onto the property from an off-site source), each on-site stormwater catchment facility, and each AWS re-pump surface water withdrawal point from any storage facility. The meters shall be read on a monthly basis within the last week of each month and be reported to the Permit Data Section, Strategic Programs Office Department on or before the tenth day of the following month. The permittee shall submit meter readings online or use District-supplied scanning forms, unless another arrangement for submission of this data has been approved by the District in writing.

A. District approved meters shall be installed within 90 days of completion of construction of the AWS delivery system for:

1. Proposed AWS inflow line(s) District ID No(s). [Specify District ID No(s).], Permittee ID No(s). [Specify Permittee ID No(s).]

2. Proposed AWS re-pump withdrawal points, District ID No(s). [Specify District ID No(s).], Permittee ID No(s). [Specify Permittee ID No(s).]

3. Proposed stormwater withdrawal point(s), District ID No(s). [specify District ID No(s).], Permittee ID No(s). [specify District ID No(s).]

B. The permittee shall continue to maintain and operate existing, non-resettable, totalizing flow meter(s) or other flow measuring device(s) as approved by the Regulation Department Director on:

1. AWS inflow line(s), District ID No(s). [Specify District ID No(s).], Permittee ID No(s). [Specify Permittee ID No(s).].

2. AWS re-pump withdrawal points, District ID No(s). [Specify District ID No(s).], Permittee ID No(s). [Specify Permittee ID No(s).].

3. Existing stormwater withdrawal point(s), District ID No(s). [specify District ID No(s).], Permittee ID No(s). [specify District ID No(s).]

C. The permittee shall install meters that meet requirements specified below upon permit issuance for previously un-metered, existing AWS sources:

1. AWS inflow line(s), District ID No(s). [Specify District ID No(s).], Permittee ID No(s). [Specify Permittee ID No(s).].

2. AWS re-pump withdrawal points, District ID No(s). [Specify District ID No(s).], Permittee ID No(s). [Specify Permittee ID No(s).].

3. Stormwater water withdrawal point(s), District ID No(s). [specify District ID No(s).], Permittee ID No(s). [specify District ID No(s).]

The meters shall adhere to the following descriptions and shall be installed or maintained as follows:

1. The meter(s) shall be non-resettable, totalizing flow meter(s) which have a totalizer of sufficient magnitude to retain total gallon data for a minimum of the three highest consecutive months permitted quantities. Approval shall be obtained in writing from the Regulation Department Director. If other measuring device(s) are proposed, the permittee shall submit documentation that the other measuring devices or accounting methods meet the stipulations listed in this condition, prior to installation. Approval for other measuring devices or accounting methods shall be obtained in writing from the Regulation Department Director.

2. The flow meter(s) or other approved device(s) shall have and maintain an accuracy within 5% of the actual flow as installed.

3. The flow meter-water piping system shall be designed for inline field access for meter accuracy testing. The meter shall be tested for accuracy on-site, as installed, every five years beginning from the date of its installation for new meters or from the date of initial issuance of this permit containing the metering condition with an accuracy-test requirement for existing meters unless the permittee demonstrates to the satisfaction of the District that a longer period of time for testing is warranted. The test shall be performed by a person certified in the test equipment used. If the actual flow is found to be greater than 5% different from the measured flow, within 30 days, the permittee shall have the meter re-calibrated, repaired, or replaced, whichever is necessary. Documentation of the test and a certificate of re-calibration, if applicable, shall be submitted within 30 days of each test or re-calibration.

4. The meter shall be installed according to the manufacturer's instructions for achieving accurate flow to the specifications above, or it shall be installed in a straight length of pipe where there is at least an upstream length equal to ten (10) times the outside pipe diameter and a downstream length equal to two (2) times the outside pipe diameter. Where there is not at least a length of ten diameters upstream available, flow straightening vanes shall be used in the line.

5. If the meter or other flow measuring device malfunctions or breaks, the permittee shall notify the District within 15 days of discovering the malfunction or breakage and replace it with a repaired or new meter, subject to the same specifications given above, within 30 days of the discovery. If the meter is removed from the withdrawal for any other reason, it shall be replaced with another meter having the same specifications given above, or the meter shall be reinstalled within 30 days of its removal from the withdrawal. In either event, a fully functioning meter shall not be off the withdrawal point for more than 60 consecutive days.

6. While the meter is off the withdrawal, the permittee shall estimate their use by multiplying the number of hours the withdrawal point was used during that month times the flow capacity of the pump or mainline, whichever is appropriate, or the permittee may request instructions on how to estimate use from the Permit Data Section. The estimate of the number of gallons used each month during that period shall be noted as an estimate when it is submitted to the District.

7. In the event a new meter is installed to replace a broken meter, it and its installation shall meet the specifications of this condition. The permittee shall notify the District of the replacement with the first submittal of meter readings from the new meter.

1-1-03, Revised 1-1-07.

2. Modification to Incorporate Alternative Water Supplies.

Within 90 days of the replacement of any or all withdrawal quantities from ground water or surface water bodies with an Alternative Water Supply, the permittee shall apply to modify this permit to reflect incorporation of the alternative source of water to replace permitted quantities in an amount equal to the quantity offset by the Alternative Water Supply. The permittee may request that the replaced water be put on standby for use when, for reasons outside the permittee’s control, the AWS become unavailable, insufficient or unsuitable for the authorized use, or economically, technically or environmentally infeasible.

1-1-03, Revised 1-1-07, 4-27-10.

Discussion: Put on all permits that include AWS. Only the set of paragraphs numbered 1.-7. above shall be applied to permits within the Dover/Plant City WUCA as described in Section 7.4 of the WUP Basis of Review. 1-1-03, Revised 1-1-07, 6-16-11.

7.0 WATER USE CAUTION AREAS

7.1 HIGHLANDS RIDGE WATER USE CAUTION AREA.

All provisions of Section 7.1 deleted in their entirety 1-1-07.

7.2 EASTERN TAMPA BAY WATER USE CAUTION AREA.

All provisions of Section 7.2 deleted in their entirety 1-1-07.

7.3 NORTHERN TAMPA BAY WATER USE CAUTION AREA.

The Governing Board originally declared portions of Hillsborough and Pasco Counties, and all of Pinellas County a Water Use Caution Area (WUCA) on June 28, 1989. The Governing Board approved expansion of the boundaries of the WUCA in June 2007. The area designated is shown in Figure 7.3-1; the legal description is provided in Rule 40D-2.801(3)(a), F.A.C. As of the effective date of this rule, all existing water use permits within the WUCA are modified to incorporate the applicable measures and conditions described below. Valid permits, legally in effect as of the effective date of this rule, are hereafter referred to as existing permits. Existing permits within those portions of the WUCA added in 2007 shall have until July 1, 2008 to comply with the provisions of this rule. Applicable permit conditions, as specified below, are incorporated into all existing water use permits in the WUCA and shall be placed on new permits issued for withdrawals located within the Area.

The Northern Tampa Bay WUCA is hereby declared a water resource caution area pursuant to Chapter 62, F.A.C.

These portions of the Basis of Review for the Northern Tampa Bay WUCA are intended to supplement the other provisions of the Basis of Review and are not intended to supersede or replace them. If there is a conflict between requirements, the more stringent provision shall prevail.

1. Agriculture.

1.1 Irrigation Water Use Allotments.

The District allocates agricultural irrigation-related water use based on a modified Blaney-Criddle model and other methods as described below. For each individual crop type, the permittee shall not exceed the quantity determined by multiplying the total irrigated acres by the total allocated inches per irrigated acre per season. Allocated inches per irrigated acre per season are determined separately for three major categories of water use, and the sum equals the total allocated inches per irrigated acre per season. An irrigated acre, hereafter referred to as "acre," is defined as the gross acreage under cultivation, including areas used for water conveyance such as ditches, but excluding uncultivated areas such as wetlands, retention ponds, and perimeter drainage ditches. Other non-irrigation related water uses shall be permitted in accordance with Section 3.3, Basis of Review.

As a guide for permit applicants and permittees, total allocated inches per acre per season for citrus in the Northern Tampa Bay WUCA are listed in tables provided in Design Aid 4, Part C, Water Use Permit Information Manual. For crops, soil types, planting dates, and length of growing season not listed in those tables, an applicant or permittee may obtain the total allocated inches per acre per season utilizing procedures described in Design Aid 4 or complete the Agricultural Water Allotment Form and submit it to the District. The District will complete and return the form calculating total allocated inches per acre per season per crop based on the information provided. A permit applicant or permittee may use alternative methods for calculating water use needs subject to District approval. 1-1-03.

A key component in calculating total allocated inches per acre per season is the assigned "irrigation water use efficiency," hereafter referred to as "efficiency". Efficiency is defined as the ratio of the volume of water beneficially used to the volume delivered from the irrigation system. For many crops, it is common for different irrigation systems and practices to be employed for different water uses (e.g., a tomato grower may use seepage irrigation for field preparation and drip irrigation for supplemental irrigation). In recognition of these differences, the District applies separate assigned efficiencies to different water irrigation-related water uses. 1-1-03.

The three major categories of agricultural irrigation-related water use are: 1) supplemental irrigation (the water delivered to satisfy the evapotranspirational need of the crop); 2) field preparation/crop establishment (the water delivered for tilling, bedding, fumigation, and planting); and 3) other water uses (i.e., frost and freeze protection,

heat stress relief, chemical application, irrigation system flushing and maintenance, and leaching of salts from the root zone). The District has assigned minimum efficiency standards for supplemental and field preparation/crop establishment irrigation requirements. These standards are listed later in this Section. Design Aid 4, Part C, Water Use Permit Information Manual, describes in detail a methodology for calculating allotted inches per acre per season for supplemental irrigation (supplemental irrigation requirements divided by the assigned efficiency standard) and the allocated inches per acre per season for field preparation/crop establishment (field preparation/crop establishment irrigation requirements divided by the assigned efficiency standard). As specified in Section 3.3 of the Basis of Review, other information and methods may be considered as supported by the facts in individual cases. 1-1-03.

Other water uses are permitted on an individual basis as follows:

1. Chemigation, irrigation system flushing and maintenance, heat stress relief, and leaching of salts-the total allocated inches per acre per season for these uses is equal to 10% of the allocated inches per acre per season of the supplemental irrigation requirement for crops irrigated with a micro irrigation system, and 5% of the allocated inches per acre per season of the supplemental irrigation requirement for crops irrigated with all other irrigation systems.

2. Frost/freeze protection-The District allows irrigation for frost/freeze protection provided that: 1) the maximum daily quantity listed on the permit is not exceeded; 2) irrigation for this purpose will not cause water to go to waste; and, 3) permittees whose annual average daily permitted water use is equal to or exceeds 100,000 gpd shall document and report the beginning and ending hours and dates, and inches per acre applied for such purpose.

The allocated inches per acre per season per crop for supplemental and field preparation/crop establishment for the January 1, 1993, management period will be based on the following minimum assigned efficiency standards. These standards shall remain in effect until modified by rule. However, for planning purposes, also listed are assigned efficiency standard goals for future management periods.

January 1, 1993 Management Period.

Citrus-the total allocated inches per acre per season for supplemental irrigation requirements shall be based on a minimum assigned efficiency standard of 75%.

Strawberries-the total allocated inches per acre per season for field preparation/crop establishment shall be 14 inches. The total inches per acre per season for supplemental irrigation shall be based on a minimum assigned efficiency standard of 75%.

Row crops irrigated with a drip system or row crops that are unmulched and not grown with a seepage system-the total allocated inches per acre per season for field preparation/crop establishment shall be based on a minimum assigned efficiency standard of 60% and 75% for supplemental irrigation requirements.

Nurseries-the total allocated inches per acre shall be based on the type of nursery, production factors, plant types, and irrigation method.

Other crops-the total allocated inches per acre per season for both field preparation/crop establishment and supplemental irrigation requirements shall be based on a minimum assigned efficiency standard of 60%.

These minimum assigned efficiencies shall remain in effect until modified by rule.

January 1, 1997 Management Period.

Based on information collected for the period 1990-1992, different efficiency standards may be developed for the January 1, 1997 management period. These efficiencies may be adopted by rule with sufficient time to allow users to prepare for implementation. The following efficiency goals are based on current information.

Citrus-the total allocated inches per acre per season for supplemental irrigation requirements shall be based on a minimum assigned efficiency standard of 80%.

Strawberries-the total allocated inches per acre per season for field preparation/crop establishment shall be 14 inches. The total inches per acre per season for supplemental irrigation shall be based on a minimum assigned efficiency standard of 80%.

Row crops irrigated with a drip system or row crops that are unmulched and not grown with a seepage system-the total allocated inches per acre per season for field preparation/crop establishment shall be based on a minimum assigned efficiency standard of 60% and 80% for supplemental irrigation requirements.

Nurseries-the total allocated inches per acre shall be based on the type of nursery, production factors, plant types, and irrigation method.

Other crops-the total allocated inches per acre per season for field preparation/crop establishment irrigation requirements shall be based on a minimum assigned efficiency standard of 60%, and for supplemental irrigation requirements shall be based on a minimum assigned efficiency standard of 65%.

January 1, 2001 Management Period.

Based on information collected for the period 1993-1996, different efficiency standards may be developed for the January 1, 2001 management period. These efficiencies may be adopted by rule with sufficient time to allow users to prepare for implementation. The following efficiency goals are based on current information.

Citrus-the total allocated inches per acre per season for supplemental irrigation requirements shall be based on a minimum assigned efficiency standard of 85%.

Strawberries-the total allocated inches per acre per season for field preparation/crop establishment shall be 14 inches. The total inches per acre per season for supplemental irrigation shall be based on a minimum assigned efficiency standard of 85%.

Row crops irrigated with a drip system or row crops that are unmulched and not grown with a seepage system-the total allocated inches per acre per season for field preparation/crop establishment shall be based on a minimum assigned efficiency standard of 60% and 85% for supplemental irrigation requirements.

Nurseries-the total allocated inches per acre shall be based on the type of nursery, production factors, plant types, and irrigation method.

Other crops-the total allocated inches per acre per season for field preparation/crop establishment irrigation requirements shall be based on a minimum assigned efficiency standard of 60%, and for supplemental irrigation requirements shall be based on a minimum assigned efficiency standard of 70%.

January 1, 2011 Management Period.

Based on information collected for the period 1996-2005, different efficiency standards may be developed for the January 1, 2011 management period. These efficiencies may be adopted by Citrus-the total allocated inches per acre per season for supplemental irrigation requirements shall be based on a minimum assigned efficiency standard of 80%.

Strawberries-the total allocated inches per acre per season for field preparation/crop establishment shall be 14 inches. The total inches per acre per season for supplemental irrigation shall be based on a minimum assigned efficiency standard of 80%.

Row crops irrigated with a drip system or row crops that are unmulched and not grown with a seepage system-the total allocated inches per acre per season for field preparation/crop establishment shall be based on a minimum assigned efficiency standard of 60% and 80% for supplemental irrigation requirements.

Nurseries-the total allocated inches per acre shall be based on the type of nursery, production factors, plant types, and irrigation method.

Other crops-the total allocated inches per acre per season for field preparation/crop establishment irrigation requirements shall be based on a minimum assigned efficiency standard of 60%, and for supplemental irrigation requirements shall be based on a minimum assigned efficiency standard of 65%.

January 1, 2001 Management Period.

Based on information collected for the period 1993-1996, different efficiency standards may be developed for the January 1, 2001 management period. These efficiencies may be adopted by rule with sufficient time to allow users to prepare for implementation. The following efficiency goals are based on current information.

Citrus-the total allocated inches per acre per season for supplemental irrigation requirements shall be based on a minimum assigned efficiency standard of 85%.

Strawberries-the total allocated inches per acre per season for field preparation/crop establishment shall be 14 inches. The total inches per acre per season for supplemental irrigation shall be based on a minimum assigned efficiency standard of 85%.

Row crops irrigated with a drip system or row crops that are unmulched and not grown with a seepage system-the total allocated inches per acre per season for field preparation/crop establishment shall be based on a minimum assigned efficiency standard of 60% and 85% for supplemental irrigation requirements.

Nurseries-the total allocated inches per acre shall be based on the type of nursery, production factors, plant types, and irrigation method.

Other crops-the total allocated inches per acre per season for field preparation/crop establishment irrigation requirements shall be based on a minimum assigned efficiency standard of 60%, and for supplemental irrigation requirements shall be based on a minimum assigned efficiency standard of 70%.

January 1, 2011 Management Period.

Based on information collected for the period 1996-2005, different efficiency standards may be developed for the January 1, 2011 management period. These efficiencies may be adopted by rule with sufficient time to allow users to prepare for implementation. The following efficiency goals are based on current information.

Citrus-the total allocated inches per acre per season for supplemental irrigation requirements shall be based on a minimum assigned efficiency standard of 85%.

Strawberries-the total allocated inches per acre per season for field preparation/crop establishment shall be 14 inches. The total inches per acre per season for supplemental irrigation shall be based on a minimum assigned efficiency standard of 85%.

Row crops irrigated with a drip system or row crops that are unmulched and not grown with a seepage system-the total allocated inches per acre per season for field preparation/crop establishment shall be based on a minimum assigned efficiency standard of 60% and 85% for supplemental irrigation requirements.

Nurseries-the total allocated inches per acre shall be based on the type of nursery, production factors, plant types, and irrigation method.

Other crops-the total allocated inches per acre per season for field preparation/crop establishment irrigation requirements shall be based on a minimum assigned efficiency standard of 60%, and for supplemental irrigation requirements shall be based on a minimum assigned efficiency standard of 70%.

These requirements shall be implemented by applying the following permit conditions to all agricultural permits, as applicable:

Effective January 1, 1993, the permittee shall not exceed the quantity determined by multiplying the total irrigated acres by the total allocated inches per irrigated acre per season for each crop type. An irrigated acre, hereafter referred to as "acre," is defined as the gross acreage under cultivation, including areas used for water conveyance such as ditches, but excluding uncultivated areas such as wetlands, retention ponds, and perimeter drainage ditches.

Allocated inches per irrigated acre per season are determined separately for three major categories of water use: field preparation/crop establishment; supplemental irrigation; and, other uses (i.e., frost/freeze protection, heat stress relief, chemical application, irrigation system flushing and maintenance, and leaching of salts). Once these three separate quantities are calculated, they are added and the sum equals the total allocated inches per irrigated acre per season, for each individual crop type.

These allocated inches per acre per season per crop for field preparation/crop establishment and supplemental irrigation (excluding nurseries, which are permitted on a case-by-case basis) are based on the minimum assigned efficiency standards listed in Table 7.3-1 below. These minimum standards shall remain in effect until modified by rule. However, for planning purposes, also listed are assigned efficiency goals for future management periods.

Table 7.3-1 Minimum Assigned Efficiency Standards and Goals.

Crop Type	Supplemental Irrigation				Field Preparation/ Crop Establishment			
	Eff. Req.	Efficiency Goals			Eff. Req.	Efficiency Goals		
	1993	1997	2001	2011	1993	1997	2001	2011
Citrus								
Existing Permits	75%	80%	85%	85%	na	na	na	na
New Permits	80%	80%	85%	85%	na	na	na	na
Strawberries								
Existing Permits	75%	80%	85%	85%	na	na	na	na
New Permits	80%	80%	85%	85%	na	na	na	na
Row Crops (with drip or unmulched, non-seepage irrigated)								
Existing Permits	75%	80%	85%	85%	60%	60%	60%	60%
New Permits	80%	80%	85%	85%	60%	60%	60%	60%
Other Crops								
Existing Permits	60%	65%	70%	70%	60%	60%	60%	60%
New Permits	70%	70%	70%	70%	60%	60%	60%	60%

In addition to the allotted quantities for field preparation/crop establishment and supplemental irrigation requirements, the permittee's total allotted inches per acre per season per crop will include the following quantities for other water uses:

1. Chemigation, irrigation system flushing and maintenance, heat stress relief, and leaching of salts-the total allocated inches per acre per season for these uses is equal to 10% of the allocated inches per acre per season of the supplemental irrigation requirement for crops irrigated with a micro irrigation system, and 5% of the allocated inches per acre per season of the supplemental irrigation requirement for crops irrigated with all other irrigation systems.

2. Frost/freeze protection-Although there are no specific quantities permitted for frost/freeze protection, the District allows irrigation for frost/freeze protection provided that: 1) the maximum daily quantity listed on the permit is not exceeded; 2) irrigation for this purpose will not cause water to go to waste; and, 3) permittees whose annual average daily permitted water use is equal to or exceeds 100,000 gpd shall document and report the beginning and ending hours and dates, and inches per acre applied for such purpose.

As a guide for the permittee, total allocated inches per acre per season for major crops in the Northern Tampa Bay WUCA are listed in tables provided in Design Aid 4, Part C, Water Use Permit Information Manual. For crops, soil types, planting dates, and lengths of growing season not listed in those tables, an applicant or permittee can obtain the total allocated inches per acre per season utilizing procedures described in Design Aid 4, or complete the Agricultural Water Allotment Form and submit it to the District. The District will complete and return the form calculating total allocated inches per acre per season based on the information provided. A permit applicant or permittee may use alternative methods for calculating water use needs subject to District approval.

1.2 Monitoring Requirements for Agricultural Water Use.

To ensure compliance with the total allocated inches per acre per season per crop, the District requires the following data to be submitted.

1. Crop Reports – All permittees with permits for 100,000 gpd or greater standard annual average daily water demand shall record the following information on either the Irrigation Water Use Form – Annual Crops, Northern Tampa Bay Water Use Caution Area, Form No. LEG-R.025.00(4/09), or the Irrigation Water Use Form – Seasonal Crops, Northern Tampa Bay Water Use Caution Area, Form No. LEG-R.024.00 (4/09), each incorporated by reference in Rule 40D-2.091, F.A.C., as applicable to the type of crop being irrigated. Items a. Through g. shall be

provided for seasonal crops (examples: vegetables or other row crops) and items a. Through d. shall be provided for annual crops and plants (examples: citrus, blueberries, commercial hay, sod, nurseries, pasture).

a. Crop type.

b. Irrigated acres per crop per season for seasonal crops; irrigated acres per crop per calendar year for annual crops.

c. The dominant soil type per entry.

d. Irrigation method(s).

e. Use or non-use of plastic mulch.

f. Planting dates.

g. Season length.

Additionally, use of the withdrawal point for crop protection and supplementation of irrigation quantities by using a tailwater recovery system shall be documented separately on the form. The completed Irrigation Water Use Forms shall be submitted to the District or submitted online by March 1 for annual crops, February 1 for summer and fall crops, and September 1 for winter and spring crops (including strawberries).

Irrigation for field preparation/crop establishment and supplemental irrigation shall be documented separately by noting the beginning and ending dates for these activities. Additionally, quantities for frost freeze protection shall be documented separately by noting the beginning and ending hour and date. The permittee shall note whether tailwater recovery is used. This information shall be submitted to the District on the Agricultural Water Use Form within 60 days following the crop season. Following December 31, 1992, if the permittee exceeds the allocated quantities, which are determined by multiplying the total irrigated acres by the total allocated inches per acre per season per crop, the permittee shall submit a report to the District which shall include reasons why the allotted quantities were exceeded, measures taken to attempt meeting the allocated quantities, and a plan to bring the permit into compliance. Reports for permittees not achieving the allotted quantities are subject to District approval. If the report is not approved, the permittee is in violation of the Water Use Permit.

2. The District will evaluate information submitted by permittees who exceed their allocated quantities to determine whether the lack of achievement is justifiable and a variance is warranted. permittees may justify lack of achievement by documenting unusual water needs, such as unusual soil or weather conditions creating greater irrigation needs than normal. However, even with such documented justification, phased reductions in water use shall be required unless the District determines that water usage was reasonable under the circumstances reported and that further reductions are not feasible. For such permittees, on a case-by-case basis, individual efficiency criteria may be developed for each management period.

3. Compliance with allocated quantities shall be determined by comparing actual use to the calculated quantities for each individual crop on a per season basis. Seasonal crops will be compared on a seasonal basis (e.g., spring tomato requirements based on the calculated inches per season), and perennial crops will be compared on an annual basis (e.g., citrus requirements based on the calculated inches per year). The District will reassess the efficiency goals prior to implementation. As a result of this reassessment, these goals may be adjusted upward or downward through rulemaking.

Revised 12-30-08, 4-27-10.

2. Augmentation.

Augmentation means using one source of water to supplement another. Typically, augmentation involves using ground water to supplement the surface water levels of lakes, ponds and wetlands. Augmentation may be required by the District to mitigate the impacts of withdrawals, or it may be requested by an applicant who wishes to raise surface-water levels. Augmentation is permitable provided that the benefits outweigh any adverse impacts to ground or surface water resources, depending on the specific situation.

Augmentation for maintenance of lake and wetland natural habitat can be permitted as long as no significant adverse impacts result from the withdrawal. Augmentation may be allowed provided that 1) alternative solutions have been addressed, 2) the need for such augmentation has been established, 3) withdrawals for augmentation do not cause significant adverse impacts, and 4) measures are taken to allow the surface water level to fluctuate seasonally as described in Section 4.12.2.d. of the Basis of Review. Augmentation above District-established applicable minimum water levels is prohibited. Maximum ground water augmentation levels for lakes currently below established minimum water levels will be based on recent historical levels.

Augmentation for purely aesthetic purposes, such as for creating and maintaining water levels in constructed ponds shall not be permitted. Existing permits which include aesthetic augmentation may be renewed only if the criteria of Section 4.12.2.c. Through i. are implemented. Reuse of water through tail-water recovery ponds in efficiently managed systems is encouraged and is not considered augmentation.

3. Lake Impacts.

A stressed condition for a lake is defined to be chronic fluctuation below the normal range of lake level fluctuations. For lakes with District-established management levels, a stressed condition is a chronic fluctuation below the minimum low management level. For those lakes without established management levels, stressed conditions shall be determined on a case-by-case basis through site investigation by District staff during the permit evaluation process. The District maintains a list of lakes within the WUCA which have been determined to be stressed.

3.1 Stressed Lakes-New Withdrawals.

Due to cumulative ground water and surface water withdrawal impacts, new withdrawals from stressed lakes shall not be permitted.

3.2 Stressed Lakes-Existing Withdrawals.

Existing permitted surface withdrawals from stressed lakes shall be abandoned or replaced with an alternate source by September 30, 1993. Existing and new permitted withdrawals from lakes which are determined by the District to be stressed following the implementation of the WUCA Rule shall abandon or replace these withdrawals with alternate sources within three years of the designation of the stressed lake. This requirement shall be implemented for all existing permits which include surface water withdrawals from stressed lakes by applying the following permit condition:

All existing surface water withdrawals from stressed lakes shall be abandoned or replaced with a surficial or Floridan aquifer ground water source, or a reuse source, by September 30, 1993. Such replacement shall require a modification of the Water Use Permit.

This requirement shall be implemented for all existing and new permits which include surface water withdrawals from lakes that may be designated stressed in the future by applying the following permit condition to all permits within the WUCA which have surface water withdrawals from lakes:

Within 3 years from notification by the District that the lake from which the permittee is withdrawing is stressed, all surface water withdrawals from this lake shall be abandoned or replaced with a surficial or Floridan aquifer ground water source, or a reuse source. Such replacement shall require a modification of the Water Use Permit.

Water users with existing surface withdrawals on stressed lakes shall be allowed some impact on the lake from the proposed replacement well as long as the quantities withdrawn do not increase.

3.3 Stressed Lakes-New Ground Water Withdrawals.

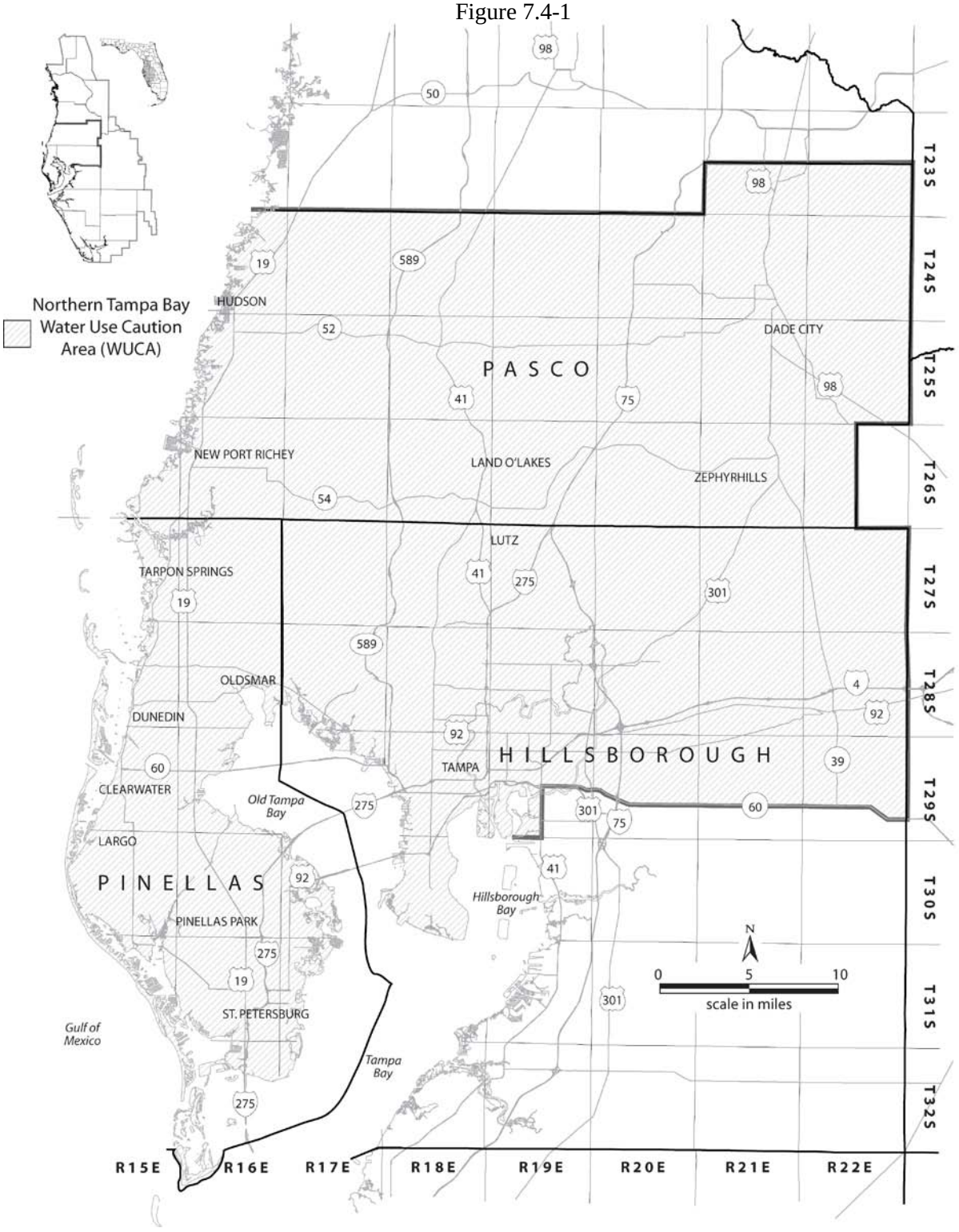
New ground water withdrawals which adversely impact stressed lakes, or which would cause a lake to become stressed, shall not be permitted.
Revised 4-27-10.

4. Compliance with the Comprehensive Plan.

Compliance by permittees with the standard permitting criteria for wetlands, lakes, streams, springs and aquifer levels set forth in Sections 4.2, 4.3.A and 4.5 of Part B, Basis of Review, Water Use Permit Information Manual, incorporated in Rule 40D-2.091, F.A.C., shall be as specified in the Comprehensive Plan set forth in Rule 40D-80.073, F.A.C. In all other respects, permittees shall be governed by the criteria set forth in Rule 40D-2.301, F.A.C.
Revised 5/26/10.

Figure 7.3-1

Figure 7.4-1



7.4 DOVER/PLANT CITY WATER USE CAUTION AREA

The Governing Board has declared a portion of Hillsborough and Polk counties the Dover/Plant City Water Use Caution Area (Dover/Plant City WUCA) effective as of June 16, 2011. The area designated is shown in Figure 7.4-1; the legal description is set forth in Rule 40D-2.801(3)(d), F.A.C. As more particularly described in Rule 40D-2.801(3)(d), F.A.C., as of June 16, 2011, all existing water use permits within the WUCA are modified to incorporate the applicable measures and conditions described below. Valid permits, legally in effect as of June 16, 2011, are hereafter referred to as existing permits. Additional or alternative permitting criteria and permit conditions are applicable to those new, renewal, or modified permits specified in 40D-2.801(3)(d), F.A.C. The Dover/Plant City WUCA is declared a water resource caution area pursuant to Chapter 62-40, F.A.C.

Portions of the area within the Dover/Plant City WUCA are also included within the Northern Tampa Bay WUCA and Southern Water Use Caution Areas, and rules pertaining to those areas remain in force within those areas. This section of the WUP Basis of Review for the Dover/Plant City WUCA is intended to supplement the provisions in other sections of the WUP Basis of Review and are not intended to supersede or replace them, except as specified in the WUP Basis of Review, including this section 7.4, or in rule 40D-2.801(3)(a). If there is a conflict between requirements, the more restrictive provision shall prevail.

1. WITHDRAWALS THAT AFFECT THE DOVER/PLANT CITY WUCA MINIMUM AQUIFER LEVEL PROTECTION ZONE.

GENERAL.

A Minimum Aquifer Level has been established for District Well DV-1 Suwannee in Rule 40D-8.626(3), F.A.C., the location of which is depicted on Figure 7.4-1. In order to address the effects of local and regional groundwater withdrawals and the variable hydrogeologic factors within the region, a Minimum Aquifer Level Protection Zone is defined as the area within the boundary of the 30 ft. drawdown contour for the January 2010 frost/freeze event (See Figure 7.4-1.). In establishing the Minimum Aquifer Level, the District has determined that the actual water level is below the Minimum Aquifer Level when certain pumping and climatic conditions occur. As required by law, the District is expeditiously implementing a Recovery Strategy for the Minimum Aquifer Level. The Dover/Plant City WUCA provisions of the WUP Basis of Review for Water Use Permit Applications, and Chapters 40D-2, 40D-8 and 40D-80, F.A.C., set forth the regulatory portion of the recovery strategy for the Minimum Aquifer Level. Compliance with this Section does not, by itself, satisfy the requirements of Chapter 40D-2, F.A.C., for applications submitted on or after June 16, 2011.

1.1 Existing Permits - Applications for the renewal or modification of a permit with no proposed increase in permitted frost/freeze protection quantities or change in Use Type associated with frost/freeze protection will be evaluated to determine compliance with the conditions for issuance of a permit set forth in Rule 40D-2.301, F.A.C., and the WUP Basis of Review, described in 40D-2.091, F.A.C., in its entirety. When evaluating the reasonable-beneficial use of the water, emphasis will be given to reasonable water need, water conservation, use of alternative water supplies, and use of alternative frost/freeze protection methods. However, the existing impacts of permitted quantities on the Minimum Aquifer Level Protection Zone, or the Minimum Aquifer Level, will not be a basis for permit denial because the Dover/Plant City WUCA Recovery Strategy taken as a whole is intended to achieve recovery to the established minimum level as soon as practicable. Existing groundwater withdrawal impacts for frost/freeze crop protection shall be evaluated at renewal or modification based on a frost/freeze design event of 21 hours of irrigation, followed consecutively by 6 hours of non-irrigation, 13 hours of irrigation, 11 hours of non-irrigation and by 14 hours of irrigation.
New 6-16-11.

1.2 Self-Relocation - A permittee with existing permitted impacts on the Minimum Aquifer Level Protection Zone as of June 16, 2011 may modify its permit to relocate to a different property all or a portion of the used and unused reasonable-beneficial permitted quantity. When relocated, the withdrawal of the quantities cannot increase impacts to the Minimum Aquifer Level Protection Zone and must meet all other applicable permitting criteria included in 40D-2, F.A.C., and this WUP Basis of Review. A Self-Relocation cannot include any change in

ownership, control, Use Type or increase in quantities. Crop rotation, by planting and irrigating non-contiguous properties within the same locale in a structured, revolving fashion, is allowed under a single permit and is not considered Self-Relocation.
New 6-16-11.

1.3 Transfer – A permit may be transferred to another person or entity provided there is no change in permitted water use activities.
New 6-16-11.

1.4 Applications For New Quantities –For applications including New Quantities for frost/freeze withdrawals located within the Dover/Plant City WUCA and applications for permits for frost/freeze withdrawals outside the Dover/Plant City WUCA but with the potential to impact the Minimum Aquifer Level Protection Zone, the District will evaluate the applications to determine impacts to the Minimum Aquifer Level Protection Zone, and all other 40D-2, F.A.C., rule criteria. The proposed use shall only be permitted if the proposed ground water withdrawals do not impact the Minimum Aquifer Level Protection Zone. Metering of wells and any alternative sources shall be required as provided below to assure that the alternatives are used when alternative frost/freeze methods are proposed for protection.
New 6-16-11.

1. "New Quantities" means groundwater for frost/freeze protection that is not currently authorized to be withdrawn by the applicant or not currently authorized to be used for the intended use by the applicant. This includes applications to modify existing permits to increase quantities, and/or change the Permit Use Type (affecting only the modified portion) and applications for an initial permit, but does not include a full or partial permit transfer. A modification to change crops or plants grown under an Agricultural Permit Use Type Classification or to change withdrawal location or Use Type that is authorized by the terms of the permit or site certification at the time of issuance, is not a change in Permit Use Type provided that the quantities do not increase. In addition, when land is mined and the land will be returned to the Use Type operation authorized under the water use permit (WUP) that existed prior to mining, such activity does not constitute a change in Use Type or New Quantities.

2. Groundwater Withdrawal Impacts and Analysis For Frost/Freeze Withdrawals - All applications for New Quantities, and applications located outside the Dover/Plant City WUCA whose requested withdrawals have the potential to impact the Minimum Aquifer Level Protection Zone, will be evaluated to determine whether the proposed withdrawal for frost/freeze will impact the Dover/Plant City WUCA Minimum Aquifer Level Protection Zone. However, the applicant has the option to reduce or redistribute the withdrawals to eliminate any impacts so that the withdrawal can be permitted. In addition to the other requirements of Rule 40D-2.301(1), F.A.C., and WUP Basis of Review, the following requirements apply to New Quantities and applications located outside the Dover/Plant City WUCA whose requested withdrawals for frost/freeze protection have the potential to impact the Minimum Aquifer Level Protection Zone:

Frost/Freeze Protection –Applications for New Quantities for frost/freeze protection shall be evaluated based on a frost/freeze design event of 21 hours of irrigation, followed consecutively by 6 hours of non-irrigation, 13 hours of irrigation, 11 hours of non-irrigation and by 14 hours of irrigation. For New Quantities, the resulting drawdown shall not exceed 0.0 ft. within or at the boundary of the Minimum Aquifer Protection Zone, in addition to meeting the requirements of Rule 40D-2.301(1), F.A.C., and the WUP Basis of Review. Existing permitted groundwater withdrawals for frost/freeze protection within the Dover/Plant City WUCA are addressed below in sections titled “Investigation of Frost/Freeze Withdrawal-Related Well Complaints” and the permit conditions for mitigation of impacts to existing legal uses.
New 6-16-11.

1.5 Net Benefit - In the case where an applicant for New Quantities and applications located outside the Dover/Plant City WUCA whose requested withdrawals are constrained by impacts to the Minimum Aquifer Level Protection Zone, the applicant may choose to provide reasonable assurance by implementation of one or more of the Net Benefit options listed below in order to mitigate the predicted impacts. In order to provide a Net Benefit, the measures proposed by the applicant must offset the predicted negative impact of the proposed withdrawal and also provide an additional positive effect within or at the boundary of the Minimum Aquifer Level Protection Zone equal

to or exceeding 20% of the predicted negative impact. For example, if the predicted drawdown is 1.0 ft., the mitigation must offset the 1.0 ft. drawdown and provide another 0.2 ft. (i.e., 20% of 1.0 ft.) of positive effect so that the result is a net improvement of 0.2 ft. There are two forms of Net Benefit, including Mitigation plus Recovery (includes Land Use Transitions), and Groundwater Replacement Credits, as described below.

A. Mitigation plus Recovery – This Net Benefit provision consists of retiring from use the historically used groundwater quantity associated with one or more permits that impacts the Minimum Aquifer Level Protection Zone. Mitigation plus recovery must either precede or be coincident with any new permitted withdrawals. Historically used quantities are those permitted quantities that the District determines have been deemed reasonable-beneficial and were withdrawn and used by a permittee. These quantities are determined based on documentation previously submitted by a permittee and other methods available to the District to verify the quantities being retired. The types of documentation submitted by permittees include seasonal/annual crop reports, metered data, and other information. Other methods of verification include aerial photography, receipts for supplies, equipment, and services, property appraiser records and other methods. For small permits below thresholds for crop reporting and metering, aerial photography and other methods will be used to determine quantities.

1. Land Use Transitions

(a) Where historically used groundwater quantity associated with one or more permits that impact the Minimum Aquifer Level Protection Zone is permanently retired, 80% of the quantity associated with the impact of the retired quantity is available to be applied as a Net Benefit.

(b) Where an existing permittee replaces groundwater that was historically used for frost/freeze protection with water from tailwater recovery systems or other alternative frost/freeze protection methods, 35% of the groundwater quantity shall remain in the permit for use as tailwater pond makeup supply or emergency standby use. The amount available for use as a Net Benefit will be 80% of the remaining 65% of the historically used groundwater quantity.

(c) Where the historically used groundwater quantities are used to provide a Net Benefit for another permittee but the donor permittee wishes to maintain a standby permit, the donor permittee's standby quantity shall be 80% of this quantity, allowing 80% of the remaining 20% to be available as a Net Benefit.

2. Recharging the aquifer and withdrawing water such that there remains a net positive impact on the Floridan aquifer potentiometric surface at least 20% greater than the impact of the proposed withdrawal.

3. Undertaking other actions to offset the proposed impact of the withdrawal plus 20% recovery.

B. Groundwater Replacement Credit

To reduce groundwater withdrawals, a Groundwater Replacement Credit can be obtained as an incentive to permittees to offset groundwater withdrawals with alternative water supplies (AWS). The holder of a Groundwater Replacement Credit can use the Credit to provide a Net Benefit where required. The process to obtain a Groundwater Replacement Credit is as follows:

(a) A Groundwater Replacement Credit is created when a person or entity (Supplier) provides a quantity of water from an alternative water supply to offset an existing permit holder's (Receiver's) groundwater withdrawals when those withdrawals impact the Minimum Aquifer Level Protection Zone. A Groundwater Replacement Credit will be available to either the Supplier or the Receiver, or both, at their mutually determined option.

(b) A Groundwater Replacement Credit will be issued for an amount equal to 80 percent of the reasonable-beneficial quantity that has been historically used.

(c) The Supplier and Receiver shall apply to the District for the credit and indicate to the District which entity should obtain the credit quantity, or whether the credit quantity will be divided between them.

(d) The District will set aside the groundwater quantities that are discontinued as a result of the offset by AWS in a standby permit that will be issued to the Receiver to allow withdrawal of all or a portion of such quantities in the event that the alternative water supply is interrupted, discontinued, becomes unsuitable or is decreased.

(e) The Groundwater Replacement Credit will exist for only so long as the Receiver maintains its use of the AWS, unless all groundwater use at the Receiver site ceases, in which case the Credit shall remain in effect and available to the holder of the Credit. The Credit will also remain available if the Receiver transfers the standby permit to a new owner at the same site who continues the same water use with the AWS.

(f) The only withdrawals that may be considered for a Groundwater Replacement Credit are those that meet the permitting criteria of Chapter 40D-2, F.A.C., and this WUP Basis of Review for Water Use Permit Applications.

(g) Reclaimed water suppliers shall not be eligible for a Groundwater Replacement Credit when reclaimed water is directed from existing reclaimed water users to other reclaimed water users and such redirection causes an existing reclaimed water user to reinstate permitted standby ground water withdrawals. In such a case the credit shall be applicable if the reclaimed water provider can demonstrate that the cumulative effect of such redirection will achieve more recovery of the Minimum Aquifer Level than would otherwise occur absent of the redirection.
New 6-16-11.

2. FROST/FREEZE PROTECTION

2.1 Crop Frost/Freeze Protection – Maximum Daily allocations for frost/freeze protection shall be allocated based on a 21 hour event. Quantity allocations shall be as follows:

(a) Blueberries, Nursery, and Strawberries shall be based on 6,788 gallons per hour per acre.

(b) Citrus shall be based on 3,000 gallons per hour per acre.

2.2 Aquaculture Frost/Freeze Protection – Maximum Daily allocation for frost/freeze protection for aquaculture shall be based on the type of fish and the volume of water replaced in the applicant's vats, ponds and tanks.
New 6-16-11.

3. ALTERNATIVE FROST/FREEZE PROTECTION

3.1. All applicants for permits for 100,000 gpd annual average daily quantities and greater that include an activity that typically uses frost/freeze protection and that have or propose to have a groundwater withdrawal with the potential to impact the Minimum Aquifer Level Protection Zone, shall investigate the technical, economic and environmental feasibility of using alternatives to groundwater for frost/freeze crop protection. If it is determined that alternatives to groundwater are not feasible, applications for New Quantities that impact the Minimum Aquifer level Protection Zone will not be permitted without a Net Benefit. However, in evaluating renewal applications for permits in effect as of June 16, 2011, a determination that alternatives to groundwater are not feasible shall not be a basis for denial of the renewal application.

3.2. Examples of alternatives to using groundwater to provide frost/freeze protection are tailwater recovery systems, stormwater systems, tunnels, covers, foam and heaters. Alternative methods can also include methods supported by documentation from the Institute of Food and Agricultural Sciences at the University of Florida. The evaluation required in subsection 3.1 shall determine whether alternatives are available to use in lieu of groundwater for all or part of frost/freeze crop protection including investigation of participation in the FARMS program set forth in Chapter 40D-26, F.A.C. Infeasibility shall be supported with a detailed explanation, including a description of the investigation of participation in the FARMS program. Use of alternatives to groundwater for frost/freeze protection shall be required where technically, economically, and environmentally feasible.
New 6-16-11.

4. WITHDRAWAL MONITORING AND REPORTING

4.1 Metering

In addition to the flow meters required by Section 5.1 of the WUP Basis of Review, new and existing permittees shall meter withdrawal quantities from each withdrawal point, including backup and standby withdrawal points, and provide meter readings as set forth below when:

1. Issued a permit with frost/freeze quantities to be withdrawn from groundwater within the Dover/Plant City WUCA.

2. Issued a permit for 100,000 gpd annual average or greater from groundwater within the Dover/Plant City WUCA.

3. Issued a permit within the Dover/Plant City WUCA for groundwater quantities to provide frost/freeze quantities authorized to be used or withdrawn from any combination of sources that if withdrawn from groundwater alone would have the potential to impact the Minimum Aquifer Level Protection Zone established for the Dover/Plant City WUCA.

4. Issued a permit within the Dover/Plant City WUCA for groundwater quantities to provide supplemental irrigation for a use that typically requires frost/freeze protection and where such protection could be achieved through groundwater withdrawals but alternative protection methods are proposed.
New 6-16-11.

4.2 Permit Conditions

1. Metering – when required to meter pursuant to 4.1 above, permits include, and new permits shall include, the following conditions as applicable:

(a) All withdrawal points, including backup and standby withdrawal points, shall be metered. All alternative water supply (AWS) quantities received, self-generated and used from each alternative water supply inflow line (line coming onto the property from an off-site source), any imported water source, each on-site stormwater catchment facility, each tailwater recovery or rainfall pond system, and each AWS re-pump surface water withdrawal point from any storage facility (the above sources collectively hereinafter referred to as "AWS Points") shall also be metered. Withdrawals or AWS Points that are required to be metered shall be metered within 90 days after construction of the withdrawal facility or AWS Point is completed.

(b) The following condition is added to permits existing as of June 16, 2011, and permits issued pursuant to an application submitted prior to June 16, 2011], that are located within the Dover/Plant City WUCA and required to be metered pursuant to 4.1 above:

The District will provide for flow meters and their installation on operational withdrawal points, inflow lines, catchment facility, tailwater recovery or rainfall capture pond and storage facility in existence prior to June 16, 2011 that are not equipped with and not required by District rule as of June 16, 2011 to have an inline, non-resettable, totalizing flow meter that, when installed, provides plus or minus 5% accuracy and an output for an automatic meter reading device. The permittee shall coordinate with the District's program for the provision of meters upon notification from the District of the month(s) and year window scheduled for the permittee's meter(s) installation. The permittee shall own any meter provided by the District. The permittee at its expense shall equip any existing withdrawal point that is capped, plugged or dismantled if it is reactivated after June 16, 2011.

(c) The cost of operation and maintenance and replacement of all meters shall be the responsibility of the permittee.

(e) Upon request of the District, permittees required to meter withdrawals shall provide the District an opportunity to perform measurements of flow during system operation.
New 6-16-11.

2. Automatic Meter Reading Devices – Add the following conditions to existing and future permits required to be metered pursuant to paragraphs 1., 3. or 4. of subsection 4.1 above:

(a) All flow meters shall be equipped to automatically collect meter readings, ambient or wet bulb temperature, system pressure, pond levels and other system indicators of the time withdrawals started and stopped and temperatures. The system shall have the ability to collect hourly and transmit to the District or the District's designated representative on a frequency not less than daily and maintained in a time series format that identifies the collection site by District site ID, date and values for each reading. Data shall be transferred automatically to the District's designated electronic data collection site, in a fixed file format as specified by the District.

(b) The District will provide and install automatic meter reading devices on each flow meter on each operational withdrawal point, and AWS point that is not already so equipped. The District shall include these devices in the District's data collection and reporting service subscription at no cost to the permittee. When automatic meter reading devices are required the permittee shall coordinate with the District's program for the provision of an automatic meter reading device upon notification from the District of the month(s) and year window scheduled for the permittee's automatic meter reading device(s) installation. The maintenance, repair, and replacement of all automatic meter reading devices shall be the responsibility of the District.
New 6-16-11.

5. INVESTIGATION OF FROST/FREEZE WITHDRAWAL-RELATED WELL COMPLAINTS BY PERMITTEES WITHIN THE DOVER/PLANT CITY WUCA

5.1 Assignment of Responsibility – Frost/Freeze Impacts

The responsibility of existing and new permittees with a withdrawal point within the Dover/Plant City WUCA to investigate and resolve frost/freeze withdrawal-related well complaints shall be determined as follows:

1. Floridan Aquifer Drawdown Contribution - Annually, the District shall determine the Floridan aquifer drawdown resulting from each permittee's permitted frost/freeze groundwater withdrawals through groundwater computer modeling simulation. The modeling shall account for each permittee's ground water frost/freeze protection quantities, the specific location of the withdrawal site and include the duration of the design event as specified in section 7.4.1.1, above.

2. Allocation Ratio – The District shall determine an allocation ratio for each permittee with frost/freeze groundwater quantities. The District shall determine each permittee's percent of the total of frost/freeze groundwater quantities permitted within the Dover/Plant City WUCA. The percent is then converted into an allocation ratio. For example, a permittee who is permitted 2% of the overall groundwater frost/freeze protection quantities in an area would have a ratio of 1:50 and would only be eligible to be assigned one well complaint for every 50 received.

3. Legal Existing Use Date - The District shall determine each permittee's existing legal use date based on when the permit was issued with the current water use quantities.

4. Impact Location - As each well complaint is received, the coordinates for the impacted well shall be entered into the model to determine the aquifer drawdown caused by each permittee at those coordinates.

5. Assignment of Responsibility - The responsibility to investigate and resolve the complaint is then assigned to the permittee that caused the greatest drawdown at a particular site, except:

(a) If the permittee's existing legal use date precedes that of the complainant's well.

(b) If the permittee has already been assigned all the complaints it is responsible for based on its allocation ratio.

(c) If the permittee is determined not to have been withdrawing ground water.

If 5.5.15.(a), 5.5.1 5.(b), or 5.5.15.(c) applies, then the process in this paragraph 5.5.1 is repeated for the permittee who has the next greatest drawdown at the complainant's site.

5.2 Assignment of Responsibility – Crop Establishment Impacts

The responsibility of existing and new permittees with a withdrawal point within the Dover/Plant City WUCA to investigate and resolve crop establishment withdrawal-related well complaints shall be determined as follows:

1. Floridan Aquifer Drawdown Contribution - Annually, the District shall determine the Floridan aquifer drawdown resulting from permitted crop establishment groundwater withdrawals for strawberry production (predominant crop establishment use) through groundwater computer modeling simulation. The modeling shall account for each of the permittee's groundwater crop establishment quantities and the specific location of the withdrawal site(s).

2. Allocation Ratio – The District shall determine an allocation ratio that shall be established for each permittee with crop establishment groundwater quantities. The District shall determine each permittee's percent of the total crop establishment groundwater quantities permitted within the Dover/Plant City WUCA. The percent is then converted into an allocation ratio. For example, a permittee who is permitted 2% of the overall groundwater crop establishment quantities in an area would have a ratio of 1:50 and would only be eligible to be assigned one well complaint for every 50 received.

3. Legal Existing Use Date - The District shall determine each permittee's existing legal use date based on when the permit was issued with the current water use quantities.

4. Impact Location - As each well complaint is received, the coordinates for the impacted well shall be entered into the model to determine the aquifer drawdown caused by each permittee at those coordinates.

5. Assignment of Responsibility - The responsibility to investigate and resolve the complaint is then assigned to the permittee that caused the greatest drawdown at a particular site, except:

(a) If the permittee's existing legal use date precedes that of the complainant's well.

(b) If the permittee has already been assigned all the complaints it is responsible for based on its allocation ratio.

(c) If the permittee is determined not to have been withdrawing ground water.

If 5.5.2 5(a), 5.5.2 5.(b), or 5.5.25.(c) applies, then the process in this paragraph 5.5.2 is repeated for the permittee who has the next greatest drawdown at the complainant's site.

5.3 Well Construction Standards

The District adopted 40D-3.600, F.A.C., effective April 9, 2002, that established well construction standards to ensure that wells built after the effective date within portions of the Dover/Plant City WUCA ("Original Dover Area") would not be impacted as a result of aquifer drawdown caused by pumping by another legal water use. Effective August 17, 2010, the District amended 40D-3.600, F.A.C. to expand the well construction standards to a larger area ("Expanded Dover Area"). If the complainant's well was constructed after April 9, 2002, or subsequently repaired in the Original Dover Area or constructed or repaired after August 17, 2010, in the Expanded Dover Area, the complaint will not be assigned to a permittee for investigation.

6. INVESTIGATION OF FROST/FREEZE PROTECTION AND CROP ESTABLISHMENT WITHDRAWAL-RELATED WELL COMPLAINTS BY PERMITTEES WITHIN THE DOVER/PLANT CITY WUCA

Permits in effect as of June 16, 2011 with a withdrawal within the Dover/Plant City WUCA shall have any permit conditions requiring investigation of frost/freeze, crop protection, crop establishment withdrawal-related well complaints or agricultural withdrawal-related complaints within a specified area or distance removed and replaced with the following permit condition. Permits issued on or after June 16, 2011 or for uses permitted prior to June 16, 2011 that include frost/freeze protection, crop protection, or crop establishment and that do not have a specific condition requiring complaint investigations shall also include this permit condition.

Frost/Freeze and Crop Establishment Withdrawal-related Well Complaints

A. Well Evalution and Temporary Supply

After the District receives a well complaint and determines that there is a responsible permittee, as provided in subsection 5, of Section 7.4 of the WUP BOR, incorporated by reference in 40D-2.091, F.A.C., the District will then notify the responsible permittee of the complaint. It will also inform the complainant of the responsible permittee.

(1) Estimates of Repairs

(a) The permittee shall arrange with the complainant for the evaluation and preparation of an estimate for restoration of water service to the complainant. The evaluation shall occur within 24 hours of the receipt of the complaint by the permittee, unless the complainant agrees to a longer time period. The permittee shall notify the District of the date and time for the evaluation of the complainant's well. Selection of a water well contractor to undertake either the repair or replacement of the complainant's well is at the discretion of the permittee, as long as the water well contractor has a license in good standing issued by a water management district. If only a pump repair is required, the person doing the repair shall have the appropriate occupational license.

(b) Alternatively, the complainant and the permittee can jointly arrange for the evaluation and preparation of an estimate to address the well complaint. If this option is chosen, then the evaluation must occur within 24 hours of the receipt of the complaint by the permittee, unless the complainant agrees to a longer time period..

(c) The permittee shall provide a temporary water supply to the complainant within five hours of the completion of the well evaluation and continue to provide the temporary water supply until water service is restored to the complainant's well as long as the complainant cooperates with the permittee in the repair of the complainant's well.

(2) Restoration of Water Supply

(a) If the evaluation indicates that groundwater pumping for frost/freeze crop protection resulted in loss of the complainant's water service, the permittee shall pay for the work necessary to restore water service to the complainant.

(b) If the well evaluation does not occur within 24 hours or within a longer time period agreed to by the complainant or a temporary water supply is not provided within five hours of the well evaluation, the complainant may arrange for the evaluation and repair or replacement of the well as necessary to restore water supply and a temporary water supply if needed. Once the complainant provides a detailed accounting of well repair or replacement expenditures, and expenses for a temporary water supply if applicable, to the District and the permittee, the permitteee shall reimburse the complainant within 30 business days of permittee's receipt of the detailed

accounting for the well repair or replacement expenditures, as well as the expenses for a temporary water supply if applicable, or provide a report to the District within five days of the receipt by the permittee of disputed costs. This report shall detail why the permittee is not responsible for reimbursing all of the funds expended by the complainant for the well repair or replacement, and a temporary water supply if applicable. The permittee shall provide a copy of this report to the complainant. The District will review the report and determine the appropriate reimbursement based on the cause of the well complaint and the appropriate remedy.

B. Pre-Complaint Repairs

If a complainant has expended funds for a well repair or replacement before submitting a well complaint to the District, and upon filing the complaint within 14 days of the water use permittee's pumping that resulted in interference, the District determines that there is a responsible permittee as provided in subsection 5, of Section 7.4 of the WUP BOR described above, if the complainant provides a detailed accounting of expenditures for well repair or replacement, and for a temporary water supply if applicable, then the responsible permittee shall reimburse the complainant for its actual expenditures, not to exceed $1,500 within 30 days of permittee's receipt of the detailed accounting of the expenditures or provide a report to the District within seven days of the receipt by the permittee of disputed costs. This report shall detail why the permittee is not responsible for reimbursing all of the funds expended by the complainant for the well repair or replacement, and temporary water supply if

applicable. The permittee shall provide a copy of this report to the complainant. The District will review the report and determine the appropriate reimbursement based on the cause of the well complaint and the appropriate remedy.

C. Permittee's Mitigation Activities and Report

1. The permittee shall inform the District as to how the permittee intends to proceed to mitigate the complaint within one business day after notice of responsibility to mitigate the complaint is delivered by the District to the permittee via electronic mail, phone call or message, or facsimile transmission, or within three business days after depositing a letter to permittee in the U.S. Mail.

2. If the permittee informs the District that it has determined that it is not responsible for mitigation of the complaint, then the permittee must provide a full explanation for its position. If, after the District has reviewed the permittee's response, the District determines that the permittee is still responsible for mitigating the complaint, the permittee shall proceed with full mitigation of the complaint as set forth in this condition.

3. All well complaints shall be fully mitigated by the permittee as soon as is practicable. Full mitigation of the well complaint shall be restoration of the complainant's well to pre-impact condition or better, including the pressure levels, discharge quantity, and water quality. Full mitigation of the well complaint necessitates the construction of a new well for the complainant if the existing well cannot be restored to pre-impact condition.

4. Within one business day after the complaint is fully mitigated, the permittee shall provide a report to the District in which the permittee details the activities undertaken by either the complainant or the permittee to mitigate the complaint as well as any reimbursements made by the permittee to the complainant. The permittee shall provide a copy of this report to the complainant. The District will review the report submitted by the permittee and shall require additional action by the permittee if the District determines that the complaint has not been fully mitigated.

D. If the permittee makes a good-faith effort to comply with the response process set forth above but is unable to repair or replace the well because of the lack of cooperation of the complainant, the permittee may request that the District deem the permittee to have satisfied this permit condition.

E. Time is of the essence of this permit condition and each of its provisions. For example, the full mitigation of a complaint does not excuse the failure to timely comply with each of the provisions of this condition.

7. ADDITIONAL PERMIT CONDITIONS

7.1 **Notice of Recovery Strategy -** All new, renewal and existing permits located in the Dover/Plant City WUCA, or that are determined to impact the Minimum Aquifer Level or Minimum Aquifer Level Protection Zone, both with or without providing a Net Benefit, include , as of June 16, 2011 the following condition:

This permit is located within the Dover/Plant City WUCA or potentially impacts the Minimum Aquifer Level or Minimum Aquifer Level Protection Zone for the Dover/Plant City WUCA. Pursuant to Section 373.0421, F.S., the Dover/Plant City WUCA is subject to a minimum levels recovery strategy that became effective on June 16, 2011. As set forth in rule 40D-80.075, F.A.C., the recovery strategy, including water use permitting rules, is subject to change based on, among other criteria, the Governing Board's periodic assessment of water resource criteria and cumulative water withdrawal impacts as described in Chapter 40D-80, F.A.C. This permit is subject to modification to comply with new rules.

7.2 Adverse Impacts –

(a) The following condition is removed from all existing permits located within the Dover/Plant City WUCA, or that are determined to impact the Minimum Aquifer Level or Minimum Aquifer Level Protection Zone, both with or without providing a Net Benefit, as of June 16, 2011:

The Permittee shall mitigate any adverse impact to environmental features or offsite land uses as a result of withdrawals. When adverse impacts occur or are imminent, the District shall require the Permittee to mitigate the impacts. Adverse impacts include the following:

1. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams, or other watercourses.

2. Sinkholes or subsidence caused by reduction in water levels.

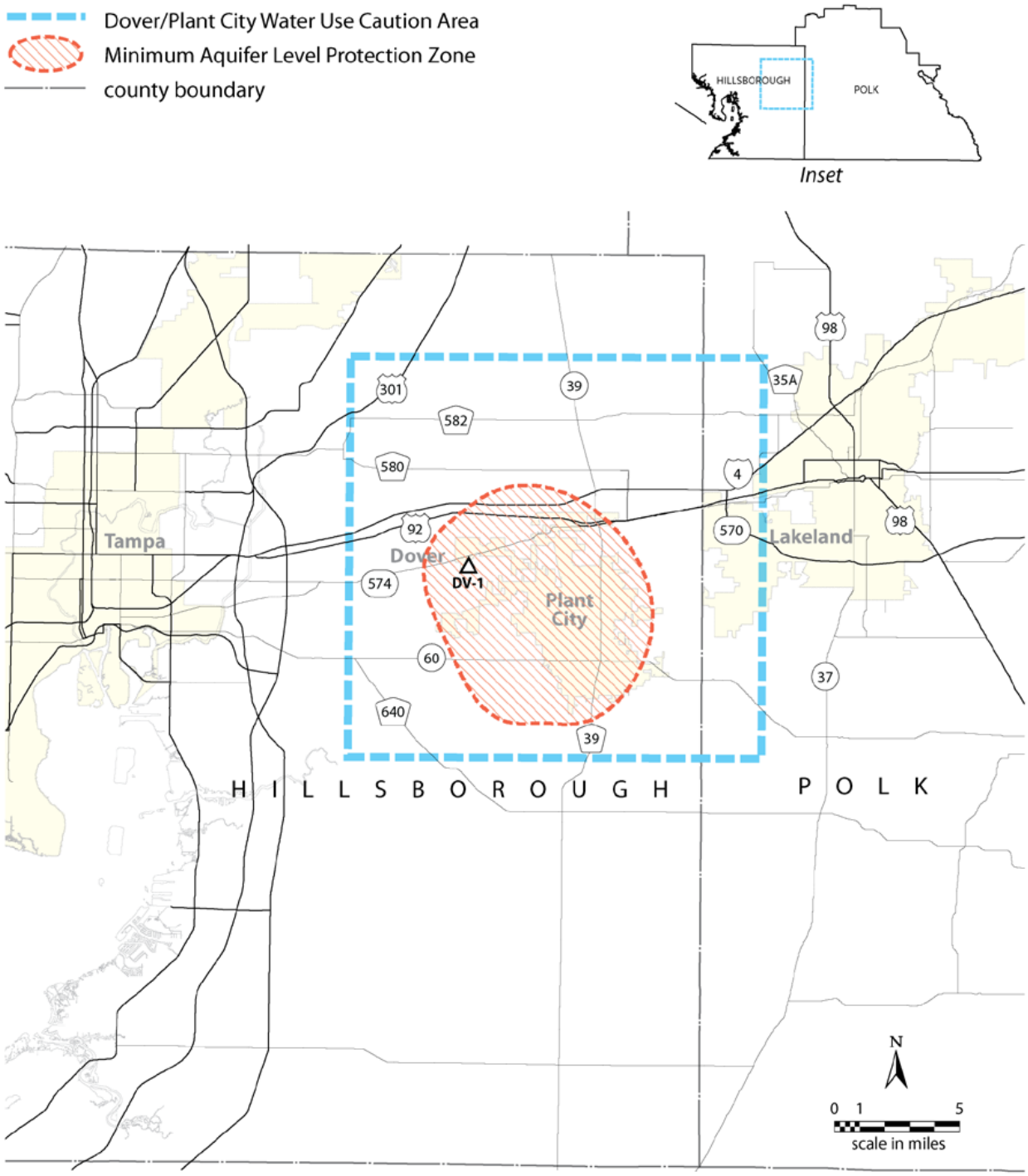
3. Damage to crops and other vegetation causing financial harm to the owner.

4. Damage to the habitat of endangered or threatened species.

(b) All new, renewal and existing permits located in the Dover/Plant City WUCA, or that are determined to impact the Minimum Aquifer Level or Minimum Aquifer Level Protection Zone, both with or without providing a Net Benefit, include, as of June 16, 2011 the following condition:

The Permittee shall mitigate any unacceptable adverse impact resulting from withdrawals to environmental features, Minimum Flows or Minimum Levels, or offsite land uses, as specified in Ch. 40D-2.301(1), F.A.C., and the Water Use Permit Information Manual, Part B, the Basis of Review for Water Use Permit Applications, Chapter 4. Should unanticipated or unmitigated unacceptable adverse impacts occur, the Permittee shall be required to expeditiously mitigate the impacts.
New 6-16-11.

8. AVAILABILITY OF MITIGATION PROCESS FOR IMPACTS TO EXISTING LEGAL USES
Persons who believe that groundwater pumping by a water use permittee for crop establishment or frost/freeze protection has interfered with the person's existing legal use of groundwater may seek mitigation based upon the process set forth in subsection 6, above. An example of interference with the person's existing legal use of groundwater is that the person's well pump no longer operates. In order to seek mitigation through this process such persons must provide the District with their name, address, phone number and the location of their affected groundwater well within 14 days of the water use permittee's pumping that resulted in the interference.
New 6-16-11.


Dover/Plant City Water Use Caution Area
Minimum Aquifer Level Protection Zone
county boundary
HILLSBOROUGH
POLK
Inset
Tampa
Dover
DV-1
Plant City
Lakeland
H I L L S B O R O U G H
P O L K
301
39
582
580
92
574
60
640
39
98
35A
4
570
98
37
N
0 1 5
scale in miles