**Public Supply Demands**

**THIRD DRAFT**

**CFWI - 2.0 Demonstration of Water Demand, Allocations, and Source Identification**

Within the CFWI Area, sections, CFWI - 2.0, excluding subsections, and CFWI - 2.1, inclusive of subsections, shall supersede it their entirety, section \_\_\_\_ of the SJRWMD Applicant’s Handbook; sections \_\_\_\_ of the SWFWMD Applicant’s Handbook; and sections \_\_\_\_ of the SFWMD Applicant’s Handbook.

To receive a permit, an applicant must demonstrate that the proposed water use is a reasonable-beneficial use of water, as required by Section 373.223, F.S., including meeting the conditions of issuance. The proposed withdrawal of water must be supported with information that provides reasonable assurance that the withdrawal quantities are necessary to supply a certain reasonable demand. Only the portion of demand for which an applicant is able to provide such reasonable assurance will be permitted. Additional or alternative provisions are required for uses within the Southern and Dover/Plant City Water Use Caution Areas in accordance with Rule 62-42.500, F.A.C.

An Applicant’s allocation reflects a consideration of factors including demands and, as applicable, treatment losses, other sources of water (such as reclaimed water), conservation, and water purchased, sold, or transferred. When necessary to prevent water resource impacts, allocations can be expressed in increments over the permit term.

In no case, however, will the allocation be greater than the total rated capacity of all existing and proposed withdrawal facilities.

Applicants using reclaimed water to meet their total water needs are not required to obtain water use permits except as otherwise provided in section 373.250, F.S. However, if reclaimed water is utilized to meet any part of the applicant's water demand, the applicant shall identify the quantities from these sources used to meet the demand.

Each permit issued by the District shall identify the source of withdrawal, the use type, and the location of the withdrawal.

**CFWI - 2.1 Allocation Expression**

Applicants shall request quantities in gallons per day for each component of demand according to the demand components listed for each use type.

CFWI - 2.1.1. Annual Quantity

The annual quantity is determined by calculating the total quantity of water to be withdrawn over a 12-month period. A daily average is calculated by dividing the annual quantity by 365. The annual quantity must equal the quantities required by each demand component for the particular use.

CFWI - 2.1.2. Peak Month

The peak month allocation represents the greatest quantity permitted to be used in any single month. The peak month allocation is determined by identifying the peak month demand for the associated use type.

**CFWI - 2.2 Public Supply Use Type**

Within the CFWI Area, this section, CFWI-2.2, inclusive of subsections, shall supersede it their entirety, section \_\_\_\_ of the SJRWMD Applicant’s Handbook, sections \_\_\_\_ of the SWFWMD Applicant’s Handbook, and sections \_\_\_\_ of the SFWMD Applicant’s Handbook.

CFWI - 2.2.1. Public Supply Demand Calculation and Components

An amount of water required for reasonable-beneficial uses must be demonstrated by the applicant. Generally, public supply demand will be calculated using the average gross per capita rate for the most recent 5-years as applied to the applicants’ service areas’ residential population served. See section 2.2.3.2.

Alternative methodologies can be used if there is reasonable assurance that the methodology is appropriate for the service area and that the withdrawal quantities requested are necessary to supply the proposed demand. Examples of alternative methodologies include, but need not be limited to, utility-level growth rates for applicants with a large number of dwelling unites occupied by non-residents or reasonable design per capita for new developments.

Applicants shall request total water quantities in gallons per day (gpd) for each demand component, as defined below, in order to justify the quantities requested in the application.

1. Residential use shall be divided into single-family residential use (including mobile homes) and multi-family residential use.
2. Non-Residential or Other Metered use shall include all uses other than residential accounted for by meter.
3. Estimated Unmetered Use shall include estimates of unmetered uses that are tracked by the applicant.
4. Treatment losses shall include 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.
5. Water losses are equal to the total water plant input minus all accounted uses described in A. through D. above. Water losses shall not exceed 10% of total distribution quantities. Greater than 10% water losses will not be considered in allocation of permitted quantities.
6. Exports / Imports shall include the quantity of water delivered to other entities through agreements or contracts and the duration of the water service delivery. For those utilities which purchase supplemental water from another utility, the volume of water historically purchased (or contracted to be purchased for proposed uses) and the duration of the agreement / contract shall be provided.

CFWI - 2.2.2. Public Water Supply Population Projections for the Residential Demand Component

Population projections for those who will be served by the public supply system shall be provided in the consumptive use permit application as part of the demonstration of reasonable assurance that the withdrawal quantities are necessary to supply a certain reasonable demand.

To determine future population to be served, population data should be derived from the county-level/parcel level forecast of population based on published University of Florida, Bureau of Economic and Business Research (BEBR) - Medium projections for target year(s). Other accepted sources of population data to evaluate the population projections include:

* The prevailing Comprehensive Land Use Plan developed under Part II, Chapter 163, F.S.;
* Historic growth rate at utility-level based on average of five years of historic population times the base year served dwelling unit population (estimate of total residential dwelling units multiplied by the estimate of persons per household). The base-year would be defined as the last full year. Average of five years historic population would include the base year and four years prior;
* The prevailing Regional Water Supply Plan; and
* Regional Planning Council Data and Special population studies.

If an applicant proposes an adjustment to the BEBR-medium projection or utility level growth rate, the applicant must provide reasonable assurance that the adjustment better predicts population growth rate due to significant changes in factors affecting the applicant’s service area’s population growth rates (either up or down) in the most recent five years that would render a five-year average not representative for projecting over the requested permit duration.

Public supply entities that provide water supply for predominantly commercial uses that do not support a permanent population are excluded from these calculations and demand projections shall be evaluated on using best available information.

For all methods, seasonal service area population may be used, if applicable, and, if used, shall be estimated using methods recommended by either the Department of Economic Opportunity or proposed by the utility and approved by the District. Applicants may also identify tourist population, if known. In addition, the population to be served can be a mixture of permanent and non-permanent population as long as it is consistently used.

CFWI - 2.2.3. Per Capita Daily Water Use

CFWI - 2.2.3.1. Uniform Method for Calculating Gross Per Capita Daily Water Use

Gross Per Capita is defined as: (WD + IM – EX) / RP Where:

* WD = ground water, surface water and stormwater withdrawals.
* IM = water imported/purchased from other supplier(s). Irrigation water, excluding Reclaimed Water, 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)
* RP = Residential Population (for a Utility Service Area) is based upon total residential dwelling units served, which include Single Family Residential, Multi-Family Residential (apartments, townhomes, condos, duplexes) and Mobile Homes, multiplied by a utility-specific estimate of persons per household. The applicant shall provide reasonable assurance that the utility specific persons per household figure used demonstrates a reasonable method for determining persons per household within its service area. Examples of reliable data include census-based averages, BEBR persons per household estimates, and utility documented surveys.

CFWI - 2.2.3.2. Uniform Method for Calculating Residential Per Capita Daily Water Use

Residential Per Capita is defined as Water Use by Dwelling Units (or Total Residential Water Use) divided by Service Area Residential Population.

CFWI - 2.2.3.3. Residential Per Capita Water Use Goal

As part of an application for renewal of an existing permit or an application for a new consumptive use permit, the permit application shall provide an end-of-permit residential per capita water use goal. Residential per capita water use shall be calculated using the formula(s) set forth in Section 2.2.3.2.

A permittee shall track its progress toward achieving the end-of-permit residential per capita water use goal. The permittee shall report to the District its progress toward achieving the end-of-permit residential per capita water use goal in any compliance report required pursuant to section 373.236, F.S., or, if a compliance report is not required pursuant to section 373.236, F.S., then as part of any application to renew the permit.

CFWI - 2.2.4. Defining the Public Water Supply Service Area

A. Public Service Commission Service Territory

If the applicant is regulated by the Public Service Commission (PSC), the service area should be that area for which the utility has obtained a certificate from the PSC that the applicant intends to serve during the requested permit duration. If the projected future service area is larger than the area certificated at the time of application, the applicant will solicit the opinion of the PSC as to the ability of the applicant to serve the area and provide the response to the District. If the PSC determines that the applicant is capable of serving the area, the projected service area will be used in the demand calculation. If used, a special condition to the permit shall require the permittee receive a certificate from the PSC for the expansion within two years of permit issuance. If a permittee will not serve a new demand located within either the existing or proposed service area, the permitted allocation is subject to modification.

B. Local Government Franchise

If the applicant is regulated by local government, the service territory should be that area for which the applicant has obtained a franchise that the applicant intends to serve during the requested permit duration.

If the projected future service area is larger than the area franchised at the time of application, the applicant will solicit the opinion of local government as to the ability of the applicant to serve the area and provide the response to the District.

If local government determines that the applicant is capable of serving the area the projected service area will be used in the demand calculation. If used, a special condition to the permit shall require the permittee receive a franchise from local government for expansion within two years.

C. Unregulated Service Territory

If the applicant is not regulated by either local government or the PSC, the projected service area must conform to the area that the utility can reasonably serve within the permit duration. If the applicant is a municipality, service areas outside of municipal boundaries must be explained by attachment of agreements or contracts to the application. The applicant may solicit the assistance of the PSC in determining whether the PSC has certificated the area outside of municipal boundaries to any other utility.

D. Conflicting Service Territories

If conflicting service area claims arise between applicants or between an applicant and public supplier permittee, the users must resolve the dispute between themselves, or seek resolution before the PSC, the local government, or through a body with substantive jurisdiction to resolve the conflict, whichever is applicable to the applicant. An applicant may either amend its application to either remove the services areas in dispute or to include an allocation based only on the non-disputed portions of the projected service areas; otherwise, the District will allocate based on the non-disputed portions of the projected service area.

**CFWI -** **2.3 I/C/I Use Type**

**CFWI -** **2.4 Mining/Dewatering Use Type**

**CFWI -** **2.5 Agricultural Use Type**

**CFWI -** **2.6 Landscape/Recreation Use Type**