**PS Demands**

**DRAFT**

This section, CFWI – X.0, shall supersede in its entirety sections XXXXXXXXXXof the SJRWMD Applicant’s Handbook; sections XXXXXXXXXX of the SWFWMD Applicant’s Handbook and sections XXXXXXXXXXX of the SFWMD Handbook.

**X.0 Demonstration of Water Sources and Demand**

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.

**X.1 Source Identification**

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

**X.2 Demonstration of Demand**

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.

**X.3 Public Water Supply**

X.3.1 Public Water Supply Permitted Withdrawal Quantities

Applicants must identify the quantities for each demand component, as defined in section X.3.2, in order to justify the quantities requested in the application. Applicants shall request total water quantities in gallons per day (gpd) for each demand component.

X.3.2 Public Water Supply Demand Components

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

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. 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.
4. Water losses are equal to the total water plant output minus all accounted uses described in a. and b. above. Water losses include leaks, unauthorized consumption, 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 a. and b. 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.
5. 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.

X.3.3 Public Water Supply Allocation Expression

X.3.3.1 Public Water Supply Annual Average Quantity

The annual average quantity for Public Water Supply 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. The annual average quantities is determined 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 quantities.

X.3.3.2 Public Water Supply Peak Month

X.3.4 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, the Applicant shall use the best and most appropriate tool for their service area. Typically, the first of the below examples is the most appropriate tool. However, other options, including, but not limited to the second and third below examples, may be appropriate for some applicants.

1. 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).
2. Historic growth rate at utility-level based on average of 5 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 and average of years historic population would include the base year and prior four years.
3. Regional Planning Council Data and Special population studies.

The population to be served can be a mixture of permanent and non-permanent population as long as it is consistently used.

X.3.5 Uniform Method for Calculating Per Capita Daily Water Use

X.3.5.1. 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.

X.3.5.2 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.

X.3.6 Public Water Supply Demand Calculation

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.

Alternative methodologies can be used if an applicant presents 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.

*Request discussion on a compliance per capita.*

X.3.9 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. If the projected future service area is larger than the area certificated at the time of application, staff will solicit the opinion of the PSC as to the ability of the applicant to serve the area. If the PSC determines that the applicant is capable of serving the area and there are no known objections to the service area expansion, staff may recommend an allocation for the projected service area. If this is done, a special condition will be attached requiring that the applicant 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 may be subject to modification.

If the PSC indicates that the applicant may not be capable of serving the expanded area or if there are objections to the expanded service area, staff may recommend an allocation based on projected water use within the existing certificated service territory until objections or other difficulties are resolved; after objections and other difficulties are resolved, staff may then recommend an allocation for the proposed area.

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.

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

If local government determines that the applicant is capable of serving the area and there are no known objections to the service territory expansion, staff may recommend an allocation for the projected service territory with a special condition that the applicant receive a franchise from local government for expansion within two years. If local government indicates that the utility may not be capable of serving the expanded service territory, staff may recommend an allocation based on projected water use within the existing service territory; after objections and other difficulties are resolved, staff may then recommend an allocation for the proposed area.

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. Staff will 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 another water supplier whose service areas are not regulated, the users must resolve the dispute between themselves or staff will recommend an allocation based on the non- disputed portions of the projected service areas. If service claims arise between users whose service areas are regulated by local government, local government must resolve the service area dispute; otherwise, staff will recommend an allocation based on the non-disputed portions of the projected service area.