



Demand Projections for Public Supply

Introduction

Chapter 373, Florida Statutes (F.S.) sets forth the requirement for regional water supply planning. Under the provisions of this chapter, the Governing Board of each water management district shall develop a Regional Water Supply Plan (RWSP) for regions within the district where existing sources of water are not adequate to supply water for all existing and future reasonable-beneficial uses and to sustain the water resources and related natural systems for the 20-year planning period. This plan shall be reevaluated every five years. In support of this effort, the Southwest Florida Water Management District (District) participated in the development of the RWSP for the Central Florida Water Initiative (CFWI) in conjunction with representatives from the Florida Department of Environmental Protection (FDEP), major public supply stakeholders and the South Florida and St. John's River Water Management districts. The CFWI Planning Area includes portions of Lake and Polk counties which are under District jurisdiction. Consequently, the population and water demands for Lake and Polk counties are from the 2025 CFWI RWSP.

Purpose

This appendix explains the assumptions, methodologies, and sources used to develop the public supply (PS) projections. The PS sector includes:

- Domestic self-supply (DSS) (residential dwellings systems that are provided water from a dedicated, on-site well and are not connected to a central utility)
- Water supply permittees with permitted water uses for:
 - Residential Single-family
 - Residential Multi-family
 - Residential Mobile Home
- Residential irrigation wells (on-site wells that serve the outdoor needs of individual residential dwellings that are connected to a central water utility system for their indoor needs).

Data and Information Sources

The methodology to develop PS water demand projections uses many data sources. Base information for PS water utility populations, water use, and per capita water use rates were derived from the District's Estimated Water Use Reports (SWFWMD, 2016-2020). The University of Florida's Bureau of Economic and Business Research (UF/BEBR) publications (2022) were used to gather base year population and future county population projections. The District's geographic information system (GIS) model also incorporates a large amount of data gathered from stakeholders, enabling the District to project population at the utility service area level (GIS Associates, Inc., 2022).





Methodology

2020 Base Year Population Methods and Assumptions

The base year for these PS water demand projections is 2020. The 2020 population was generated by extrapolating back from the GIS Associates, Inc. (GISA) 2021 population estimate using the compound annual growth rate between 2021 and 2025. This was performed to keep the base year consistent with the subsequent projected years. For example:

- a) Utility X's 2021 population estimate is 5,704
- b) Utility X's 2025 population projection is 5,984
- c) Annual growth percentage over the four-year period was calculated using Microsoft® Excel's rate formula: RATE(4,,-5704,5984) = 1.21%
- d) Utility X's 2020 population estimate = 5,704 * (100%–1.21%) = 5,635

Utilities with permitted quantities less than 100,000 gallons per day (gpd) are not required to report population or submit service area information. Consequently, the base year population for these permits was obtained from the application information related to the last issued permit revision.

Domestic self-supply (DSS) is defined as that portion of the county population not served by a utility. County DSS population estimates and projections were calculated as the difference between the total county population estimate or projection and the total population served by the utilities. For those counties not fully contained within the District boundaries, only that portion of the population within the District was included (Table 1 and Table 2).

2020 Base Year Water Use

The 2020 PS base year water use for each large utility is derived by multiplying the average 2016-2020 unadjusted gross per capita rate, if applicable, by the 2020 estimated population for each individual utility. In the case of small utilities, per capita information was obtained from the application information related to the last issued permit revision. If no per capita information was found in the last permit, the per capita is assumed to equal the average county unadjusted gross per capita.

Base year water use for small utilities is derived by multiplying the per capita from the last issued permit times the 2020 estimated population from the last issued permit.

Base year water use for DSS is calculated by multiplying the 2020 DSS population for each county by the average 2016-2020 residential countywide per capita water use as defined below.

2016-2020 Average per Capita Water Use Rate

Precipitation in the years 2016-2020 (average 54.51 inches) was slightly higher than the historical District average (52.82 inches). Rainfall between 2016-2019 was above the long-term District average, whereas lower than average precipitation in 2020 brought the 2016-2020 average close to the historical average. Typically, there is an inverse relationship between public supply water use and annual precipitation (i.e., less rain results in increased water use, largely due to outdoor water use). This inverse relationship is demonstrated by a lower Districtwide average gross per capita per day (gpcd) water use rate of 96 gpcd in 2018 than the Districtwide average per capita





water use rate of 99 gpcd in 2020. The per capita water use rate is the factor applied to projected population to project water demand (described below). Therefore, it is necessary for the base year per capita rate to represent water use in an average year. To address this situation, the District has calculated average five-year per capita use rates using data provided by utilities in their Public Supply Annual Reports and published in the Estimated Water Use Reports for the years 2016 through 2020. The unadjusted gross per capita rate used is calculated as Withdrawals + Imports – Exports – Treatment Losses divided by the Served Functional Population. For large utilities, this information is published in Table A-1 of the "Estimated Water Use Report" for years 2016 to 2020. For small utilities, the per capita is assumed to equal the per capita from the last issued permit or the five-year average unadjusted gross per capita for the county. Domestic selfsupply (DSS) per capita was taken from the countywide residential per capita provided in Table A-2 of the "Estimated Water Use Report" for the years 2016 to 2020.

Population Projections

The population projections made by BEBR are generally accepted as the standard throughout the State of Florida (UF BEBR, 2022). However, these projections are made at the county level only. Accurately projecting future water demand requires more spatially precise data than the county-level BEBR projections. Consequently, the District's projections are BEBR projections disaggregated to land parcel level, which is the smallest area of geography possible for population studies. In turn, these parcel-level projections are normalized to the BEBR medium projection for the counties. Using this methodology, the District contracted with GISA to provide small-area population projections for the 16 counties entirely or partly within the District.

In the case of Manatee and Pinellas counties, the sum of the projections for all utilities exceeds the projected county population. Thus, the county population was increased enough to cover the deficit plus allow for self-supplied population. Thus, county total population was recalculated as follows:

Original county total + deficit + GISA self-supplied population estimate.

GIS Model Overview

This geographic information system (GIS) based model projects future Census Population Cohort population growth at the parcel level and normalizes those projections to BEBR county projections. First, a Countywide Build-Out Model is developed from the base parcel dataset. Current permanent population is estimated and then the maximum population growth is determined at the parcel level. Areas which cannot physically or lawfully sustain residential development (e.g., built-out areas, water bodies, public lands, commercial areas) are excluded from the Countywide Build-Out Model. Conversely, the model identifies areas where growth is more likely to occur based on proximity to existing infrastructure and available services such as schools, shopping centers, and entertainment opportunities.

Next, population growth is modeled between the current estimated population and the build-out population. Projections are based on a combination of historic growth trends and spatial constraints and influences, which restrict or direct growth.

BEBR develops three projections for each county: low, medium, and high. BEBR's medium projection is widely considered to be the most likely scenario. For this reason, the District's small area projections by year are controlled by BEBR's medium projection for each county.





The base year for the projection model is 2021. Projections were made through the year 2045 in the following five-year increments: 2025 through 2030, 2030 through 2035, 2035 through 2040, and 2040 through 2045.

Finally, the parcel level projections are easily aggregated by any set of boundaries desired (e.g., PS utility service areas, municipalities, watersheds). For the District's planning efforts, parcel projections are summarized by PS utility service areas. Complete methodology, references, tables, and data sources can be found by referring to the published technical memorandums supporting the GIS Model: "The Small-Area Population Projection Methodology of The Southwest Florida Water Management District," and "Updates to The Southwest Florida Water Management District's Small-Area Population Projection Model," both dated December 15, 2022, GIS Associates, Inc.

Countywide Build-Out Models

The Countywide Build-Out Models are composed of multiple GIS data elements. Each model is based on the county's property appraiser GIS parcel database, including the associated tax roll information. Other elements incorporated into each build-out model include the 2020 U.S. Census data, District wetland data, local government future land use maps (FLU), and Development of Regional Impact (DRI) plans for the county of interest.

Parcels

Geographic Information System (GIS) parcel layers and county tax roll databases were obtained from each county's property appraiser office. Parcel geometry was checked for irregular topology, particularly overlaps and fragments. Parcel tables were checked for errors, particularly nonunique parcel identifiers and missing values. Required tax roll table fields include actual year built, Florida Department of Revenue (DOR) land use code, and the total number of existing residential units for each unique parcel. In cases where values or fields were missing, other information was extrapolated and used as a surrogate. For example, data reported by the State of Florida was used to identify the number of residential units and population in large group quarters facilities.

2020 U.S. Census Data

Some of the essential attribute information to translate parcels to population in the County Buildout Submodels were derived from 2020 Decennial Census data . Average housing unit occupancy and population per household by census tract were calculated and then transferred to each county's parcel data. When combined with parcel-level housing units from property appraiser data, these were used to estimate 2021 population in households at the parcel level. When added to our estimates of population in group quarters (estimated using property appraiser bed counts, 2021 BEBR surveys of large group quarters, and 2020 Census counts), the resulting estimates were then controlled at county and place levels to the 2021 BEBR population estimates.

Water Management District Boundaries

Each parcel in the Countywide Build-Out Models was also attributed with the District boundaries, which enable the countywide models for any counties split between two or more districts to be summarized by the District.





Wetlands

Wetlands play a large role in modeling a county's build-out. The District, along with the FDEP, has been given regulatory powers over private and public lands and is required by Chapter 373, F.S., to protect water resources of the state. However, the District and FDEP, under the auspices of the U.S. Army Corps of Engineers, have a permit process by which wetlands can be altered for development. The Countywide Build-Out Models consider the impact wetlands have on residential development.

The District maintains detailed GIS databases of wetland areas and wetland mitigation areas within its boundaries. These databases contain the location and spatial extent of the wetlands and wetland mitigation areas, as well as the specific types of wetlands, as defined by the District's land use and land cover classification system. Certain wetland types were identified that would be difficult and expensive to convert to residential development. These areas were identified in the District's wetland database and applied to the build-out model. The wetland types include streams and waterways, lakes, marshy lakes, reservoirs, bays and estuaries, slough waters, wetland hardwood forests, mangrove swamp, mixed wetland hardwoods, cabbage palm wetland, cabbage palm hammock, wetland coniferous forest, cypress, pond pine, hydric pine flatwoods, wetland forested mixed, freshwater marshes, saltwater marshes, wet prairies, emergent aquatic vegetation, mixed scrub-shrub wetland, and non-vegetated wetland.

Using GIS techniques, the area of wetlands within parcels were calculated and recorded as the water area for that parcel. If the area covered by water within a parcel exceeded 0.5 acres, it was subtracted from the total area of the parcel feature to determine the relative developable area in that parcel.

There were exceptions to this rule. In some cases, parcels with little or no developable area after wetlands were removed were already developed, thus the estimated unit total was not reduced by the wetland acreage. In other cases, inaccurate wetland delineations were overridden, such as when a newly platted residential parcel was shown to be covered by a wetland. In such a case, the parcel was considered developable by the submodel.

Future Land Use

Future Land Use (FLU) maps are essential elements of each county's build-out model, as they help guide where and at what density residential development will occur within a county. Future Land Use (FLU) maps are a part of the Local Government Comprehensive Plans required by Chapter 163, Part II, F.S. They are typically developed by the local government's planning department, or, in some cases, a regional planning council with guidance from the local government. The latest available FLU map is obtained annually and applied to the build-out model.

Future Land Use (FLU) classifications for residential land uses are assigned maximum dwelling unit densities (per acre) or density ranges. These ranges are intended to guide the type and density of development. However, development does not always occur at FLU guided densities. For this reason, the County Build-out Submodels reflect the median density of recent development for each future land use category in the specific incorporated place. For example, if a city's medium density residential future land use designation allows up to 8 housing units per acre, but the median density of units built over the last 20 years is 5.7 housing units per acre, the submodel assumed future densities at 5.7 housing units per acre for that future land use designation in that city. The median density calculation was typically limited to the last 20 years



of development within each unique combination of land use and jurisdiction, as more recent development was deemed a better proxy for future densities than older development.

In some cases, limiting the historical data to the last 20 years resulted in too small a sample, so either county average values were used (extended beyond the jurisdiction) or all historical development was used (not limited to the last 20 years). In those cases, the determination of which sample to use depended upon the heterogeneity of the category across county jurisdictions and the heterogeneity of historical densities prior to the last 20 years. Also, vacant or open parcels less than one acre in size were typically considered single family residential, with one housing unit as the maximum allowable density

Build-out Density Calculation

Using GIS overlay techniques, attributes of the census, political boundary, wetlands, and future land use data were attributed to each county's parcel data to develop the County Build-out Submodels. These submodels forecast the maximum residential population by parcel at buildout.

Census tracts where the 2020 population was zero, and therefore the average persons per housing unit was zero, were assigned the county's average persons per housing unit. Also, if there were tracts with 2020 census values for persons per housing unit greater than zero that were based on a small number of homes with greater than five persons per housing unit, the county's average persons per housing unit was typically used.

Large Planned Developments

The final step in the development of the County Build-out Submodels was adjusting build-out densities within large planned developments (e.g., Developments of Regional Impact, Sector Plans, and Rural Land Stewardship Areas) to correspond with approved development plans wherever their boundaries are available in a GIS format. Although large planned developments often do not develop as originally planned by the developer, the total number of units planned (regardless of timing) is likely to be a better forecast of the units at build-out than one based on the median historic densities. Therefore, in each of the County Build-out Submodels, parcels with centroids within a large planned development were attributed with the name of the development. The build-out densities for those parcels were adjusted so that the total build-out for the development was consistent with the development plan, and the build-out population for that area was recalculated.

Growth Drivers Model

The Growth Drivers Model is a raster (cell-based) dataset representing development potential as determined by incorporating a GIS suitability model. This model is a continuous surface of 10-meter cells containing relative values of 1 to10, with 10 having the highest development potential and 1 having the lowest development potential. It influences the Population Projection Model by factoring in the attraction that certain spatial features, or growth drivers, have on development. These drivers are defined from transportation features and land use/cover types including:

1) Proximity to roads and interchanges prioritized by level of use (with each road type modeled separately)



- 2) Proximity to existing residential development
- 3) Proximity to existing commercial development (based on parcels with commercial land use codes deemed attractors to residential growth)
- 4) Proximity to coastal and inland waters
- 5) Proximity to large planned developments

Each of the drivers listed above were used as independent variables in a logistic regression equation. Dependent variables included existing residential units built during or after 1995 as the measure of "presence", and large undeveloped vacant parcels outside of large planned developments were used to measure "absence". The resulting equation could then be applied back to each of the regional grids resulting in a single regional grid with values 0 through 100, for which a value of 0 represented the lowest relative likelihood of development, and a value of 100 represented the highest relative likelihood of development.

This seamless, "regional" model covers the counties whose boundaries are all or partially within the District, plus a one-county buffer to eliminate edge effects. In this case, the edge effects refer to the presence or absence of growth drivers outside the District that could influence growth within the District. This model was then used by the Population Projection Model to rank parcels in undeveloped Census blocks based on their development potential.

Population Projection Model

The Population Projection Model integrates the Countywide Build-Out Models and the Regional Growth Drivers Model with historic growth trends and county-level population controls from BEBR.

Historic Growth Trends

Historic growth trends were based on historic population counts from the 1990, 2000, 2010, and 2020 censuses. For 1990, 2000, and 2010, census block population counts were summarized at the 2020 tract level and combined with the 2020 tract population counts. These counts were used to produce eleven tract level projections using five different demographic extrapolation methods using multiple base periods. The length of the base was adjusted to roughly match the length of the projection horizon, so for a 20-year horizon, 20 years of historical data were used to establish the growth trends. The number of trend calculations varied based on the length of the base period used, and the highest and lowest calculations were discarded to moderate the effects of extreme projections. The remaining projections were then averaged.

The five demographic extrapolation methods for projecting population utilized by the model were Linear, Exponential, Constant Share, Share-of-Growth, and Shift-Share. The Linear and Exponential techniques employ a bottom-up approach, extrapolating the historic growth trends of each census tract with no consideration for the county's overall growth. The Constant Share, Share-of-Growth, and Shift-Share techniques employ a ratio allocation, or top-down approach, allocating a portion of the total projected county population or growth to each census tract based on that census tract's percentage of county population or growth over the historical period. Each of the five methods is a good predictor of growth in different situations and growth patterns, so using a combination of all five and discarding the highest and lowest results was the best way to avoid the largest possible errors resulting from the least appropriate techniques for each census tract within the six counties. This approach is similar to BEBR's county population forecast methods, but the base periods and the number of projections are somewhat different because





annual estimates are not available at the tract level. This methodology is patterned after the methodology used by BEBR and is well suited for small area population projections. The details of the methods are as follows:

Linear Projection Method

The Linear Projection Method assumes that future population change for each census block will be the same as over the base period. Three linear growth rate calculations were made, 1990 to 2020, 2000 through 2020, and 2010 through 2020.

Exponential Projection Method

The Exponential Projection Method assumes that population will continue to change at the same annual growth rate as over the base period.

<u>Constant Share Projection Method</u> The Constant Share Projection Method assumes that each census tract's percentage of the county's total population will be the same as over the base period.

Share of Growth Projection Method

The Share of Growth Projection Method assumes that each census tract's percentage of the county's total growth will be the same as over the base period. Three share of growth rate calculations were made, 1990 through 2020, 2000 through 2020, and 2010 through 2020.

Shift Share Projection Method

The Shift Share Projection Method assumes that each census tract's percentage of the county's total annual growth will change by the same annual amount as over the base period. Three shift share calculations were made, 1990 through 2020, 2000 through 2020, and 2010 through 2020.

Average of the Projection Extrapolations

Because the number of trend calculations varied based on the length of the base period used, different combinations of projections were averaged for different forecast years.

- 1) For 2025 and 2030 projections, five calculations with base periods up to 10 years were used. The lowest and highest of the five were excluded to moderate the most extreme results, and the remaining three were averaged.
- 2) For 2035 and 2040, eight calculations with base periods up to 20 years were used. The two lowest and two highest of the eight were excluded, and the remaining four were averaged.
- 3) For 2045 and 2050, eleven calculations with base periods up to 30 years were used. The three lowest and three highest of the eleven were excluded, and the remaining five were averaged.

Growth Calculation Methodology

The Population Projection Model then automated growth calculations using the historic growth trends and queries of the County Build-out Submodels and the Growth Drivers Submodel. The methodology for calculating growth for each projection increment included the following steps:

- 1) Apply the tract-level projected growth to parcels within each tract, distributing growth to parcels with the highest driver values first.
- 2) Check growth projections against build-out population and reduce any projections exceeding build-out to equal the build-out numbers.





- a) If the Small-Area Population Forecasting Model's projections exceeded the BEBR target growth, reduce the projected growth for all tracts by the percentage that the projections exceeded the BEBR target.
- b) If the Small-Area Population projection model's projections were less than the BEBR target, develop parcels with the highest growth driver values and available capacity until the BEBR target growth is reached.

Counties that are partially within another water management district were processed in their entirety and controlled to the BEBR-based target growth.

Non-Permanent Population Projections

In addition to the permanent population projections generated by the Population Projection Model, projections of non-permanent population were also made. Those projections include peak seasonal population, permanent plus seasonal population (or functionalized seasonal population), tourist population, and net commuter population. The methods derived by the District and implemented by GISA for projecting those population types are described in this section. For a more detailed explanation of these methods, see the District's SWUCA II Population Guidelines.

Peak Population

Seasonal population is estimated using a combination of 2010 U.S. Census data (at the Zip Code Tabulation Area [ZCTA] level) and hospital admissions data. Average 2009 to2011 emergency room admissions data was used for a population cohort typical of seasonal residents (between the ages of 45 and 74).

A Seasonal Resident Ratio was calculated by ZCTA to estimate the proportion of peak (including seasonal) to permanent population. This 2010 U.S. Census-era ratio is held constant over time when applied to future projections of population, but it will be updated with each decennial Census. The ratio was derived using the following generalized steps:

- 1) Subtract total 2009 to 2011 total third quarter (Q3, or July, August and September) hospital admissions from first quarter (Q1, or January, February and March) admissions.
- 2) Calculate the average annual difference between Q1 and Q3 by dividing above result by three.
- 3) Calculate a seasonal population estimate for ZCTA by dividing above difference by the general population's probability of being admitted to the emergency room (approximately 2.23%).
- 4) Calculate the Seasonal Resident Ratio by adding the seasonal population to the permanent population and dividing that total by the permanent population.

This ratio can then be applied to future projections of permanent population to derive peak population projections.



Permanent plus Seasonal Population or Functionalized Seasonal Population

The functionalized seasonal population is the peak seasonal resident population adjusted downward to account for the percentage of the year seasonal residents typically reside elsewhere and the lack of indoor water use during that time. It was calculated using the following generalized steps:

- 1) Determine the appropriate proportion of the year seasonal residents spend in Florida. This varies from beach destination counties (44.2%) to non-beach destination counties (56.7%).
- 2) Develop a seasonal resident adjustment based on average per capita water use.
 - a) The ten-year (1996–2006) districtwide average per capita use is 132 gallons per person per day, and 69.3 is estimated indoor per capita use; (Alliance for Water Efficiency, 1999).
 - b) The adjustment factor is calculated using the following equation for "beach destination" counties (Charlotte, Manatee, Pinellas and Sarasota):

((0.442 x 132 gpd) + ((1 - 0.442) x (132 gpd - 69.3 gpd)/132 gpd = 0.707

c) The adjustment factor is calculated using the following equation for "non-beach destination counties":

 $((0.567 \times 132 \text{ gpd}) + ((1 - 0.567) \times (132 \text{ gpd} - 69.3 \text{ gpd})/132 \text{ gpd} = 0.773$

- Calculate "functionalized" seasonal population by multiplying the seasonal population by the appropriate seasonal resident adjustment factor for the particular county (0.707 or 0.773).
- 4) Calculate total functional population by adding the functionalized seasonal population to the permanent population.
- 5) Calculate ratio of Census-era functional population to permanent population.
- 6) Apply above ratio to future projections of permanent population to derive functional population projections.

Tourist Population

The tourist population projections were based on 26 years (1996-2021) of county level lodging room data from the Florida Department of Business and Professional Regulation (DBPR). The District's methodology for projecting future tourist rooms by county uses two different methods and averages the two results for each county.

The first method projects the increase in rooms by county by extrapolating the linear trend using the least squares method derived from the last 26 years of county total room estimates. This was the method used by the District for the past several years.

A second method projects future rooms based on projections of employment in the Accommodation and Food Services industries (from data from Woods and Poole). This is also an extrapolation of a linear trend using the least squares method, but rooms by county are projected as a function of a county's employment projections rather than time.



District staff previously tested both methods by projecting values for the years 2007 to 2013 using room estimates from 1996 to 2006. Based on the differences between actual room estimates and projected values for 2007 to 2013, neither method was clearly superior to the other. For that reason, District staff opted to use both methods. The results of both methods were averaged, but only after adjusting for the average 2007 to 2013 error for each projection in each county.

These projections of future rooms were then converted to "functionalized" tourist populations by applying various county level average unit occupancy and party size ratios. These ratios were provided by the District, who also updated the values associated with locations identified as short-term rentals for this projection set based on District research.

These projections of tourist population were joined to the existing lodging facility locations. No attempt was made to project future locations of lodging facilities, as:

- 1) The precise locations would be highly speculative.
- 2) It was assumed that lodging facilities often are built in the general vicinity of existing lodging facilities, or at least in close enough proximity to be within the same utility service area.

Net Commuter Population

The net commuter population projections were based on special tabulations from the American Community Survey conducted in the years 2006 to 2010. For each 2010 U.S. Census tract, the ratio of net commuters to permanent population was calculated. This ratio was then applied to future projections of permanent population to derive projections for net commuter population. That population was then "functionalized" with the following ratios:

- 1) 8/24 (typical working hours per day)
- 2) 5/7 (typical working days per week)

By applying both of these ratios to the net commuter population, the resulting functional net commuter population is 23.8 percent of the actual net commuter population. This functional number better reflects the water use that is expected for net commuters.

Note that the net commuter population projection summaries by utility service area were often negative, as many utilities serve "bedroom communities" and other areas where more residents work outside the utility service area than the population (residents and non-residents) employed within it. Only positive net commuter populations were included in a utility's total functional population.

Summarize By Utility Service Areas

The parcel-level results are then summarized by PS service area boundaries for all utilities districtwide that average at least 0.1 million gallons per day (mgd) of total water use. These boundaries, maintained by the District, are overlaid with the districtwide parcel-level population projection GIS layer, and each parcel within a service area is assigned a unique identifier for that service area. The projected population can then be summarized by that identifier and joined to the District's potable service area database to produce tabular or GIS output. Note that these service areas change over time, so for any future use of these deliverables, it is important to match this projection set only with the service areas included in the GIS deliverables.



Spatial Incongruity of Boundaries

Due to mapping errors, the service area boundaries do often bisect parcel boundaries. In the present modeling activity, parcels are deemed to be within a given service area if their center points (or centroids) fell inside the service area boundaries. The error associated with this spatial incongruity at the parcel level was much smaller than would be the case with census tract level data. This is one of the primary benefits of disaggregating census tract level data to the parcel level. The percentage of parcels erroneously attributed or excluded from a service area by this process is insignificant.

Final Results

The final results are provided in tabular format (Microsoft Excel spreadsheet) and GIS format (ESRI's file geodatabase). If there are discrepancies, the spatial results (each county's parcellevel population layer) may be used in part to depict projected patterns of future growth. The spatial data is available for download from the District's demographics webpage.

The population projections detailed in Tables 3 through 19, except for Lake and Polk counties (Tables 10 and 16) are the sum of the functionalized permanent, seasonal, net commuter, and tourist populations. It should be noted that only positive net commuters were aggregated, and service areas with negative net commuters were not penalized. For Lake and Polk counties (Tables 10 and 14), the population projections represent permanent populations and are from the CFWI RWSP demand projections.

There are some uncertainties with the model projections. In some instances, the projections detailed in Tables 3 through 19 may not match the raw model output in the tabular format (Microsoft Excel spreadsheet) and the GIS format (ESRI's file geodatabase). As the parcel level projections are summarized by PS service area boundaries and the service area is incorrect or includes DSS population that is not delineated as self-served, the aggregated population could be less than or greater than what the utility is actually projected to serve. Upon review and identification of such cases (including stakeholder input), the functional population for such instances was revised to reflect the correct service area boundaries and/or reduction of DSS.

Adjusting Population Projections using 2021 Estimated Water Use

Many public supply service areas include a significant number of self-supplied and vacant parcels within their boundaries. In most cases, the service area layer does not include information on self-supplied or not-yet-served areas. The population projections generated by GISA's parcel projection model include self-supplied persons or population in parcels not yet served. GISA generates projections for 308 service areas. Ninety-four of these service areas had a 2021 population estimate that was at least ±5 percent different from the 2021 population served estimate from the Estimated Water Use Report. Here is an example on how the population estimate and projection was adjusted using the 2021 population served estimate:

a) Results from GISA's parcel level model for utility Z:

2025

| Total | Total | Total | Total | Total | Total |
|------------|------------|------------|------------|------------|------------|
| Functional | Functional | Functional | Functional | Functional | Functional |
| Population | Population | Population | Population | Population | Population |
| 2021 | 2025 | 2030 | 2035 | 2040 | 2045 |
| 1,452 | 1,494 | 1,578 | 1,791 | 2,125 | |

- b) In 2021, the utility reported a population served estimate of 1,316 people
- c) This population estimate is 9 percent lower than the GISA projection
- d) Thus, new projections are generated by applying the GISA growth rates to the 2021 population served estimate:

| Total | Total | Total | Total | Total | Total |
|------------|------------|------------|------------|------------|------------|
| Functional | Functional | Functional | Functional | Functional | Functional |
| Population | Population | Population | Population | Population | Population |
| 2021 | 2025 | 2030 | 2035 | 2040 | 2045 |
| 1,316 | 1,353 | 1,430 | 1,623 | 1,926 | 2,204 |

Water Demand Projections

Water demand projections are calculated for the years 2025, 2030, 2035, 2040, and 2045. To develop these projections, the District used the 2016-2020 average unadjusted gross per capita water use rate and applied it to the projected populations, described above. In the case of small utilities (utilities permitted for less than 100,000 gpd), the 2016-2020 per capita is the per capita stated in the last issued permit or the average unadjusted gross per capita of the county.

One-in-Ten Drought Event

"The 1-in-10 year drought event is an event that results in an increase in water demand of a magnitude that would have a 10 percent probability of occurring during any given year" (1-in-10 year Drought Subcommittee of the Water Planning Coordination Group, 1998). The 1-in-10 year Drought Subcommittee of the Water Planning Coordination Group, as stated in their final report, determined that a 6.0 percent increase in demand will occur in such an event for PS water use. Therefore, the one-in-ten year water demand projections are the average year demands times 1.06.

Residential Irrigation Wells

These are defined as private wells smaller than 6 inches which do not require a Water Use Permit (WUP); however, for this analysis, wells less than 5 inches in diameter were selected because of the unlikely scenario that any residential unit has irrigation wells greater than 4 inches in diameter. These wells are used primarily for outdoor irrigation purposes at residences that are connected to a central utility system and receive potable water service for indoor use. Using the methodology described below, District staff has estimated the number of domestic irrigation wells by county



and their associated water demand. This information was updated and incorporated into the below PS demand projections (Table 23). Currently, the District estimates that approximately 332 gpd are used for each irrigation well (Dukes and Boyer, 2018).

Using the District's well construction permit GIS feature class, the following selection criteria are necessary to capture residential irrigation wells:

1) Use Type equal to 'Irrigation' or 'Irrigation – Landscape'

2025

- 2) Diameter less than 5 inches
- 3) Only include wells that lie inside PS service areas
- 4) Site status description of active, inactive, proposed, or blank
- 5) Exclude wells that lie within WUP Control Areas Permitted
- 6) Include only those wells permitted by the District (do not include those within the St. John's River Water Management District boundary)

Review

The District made available the draft document for review and comment, as each stakeholder may have a much more intimate understanding of the permits for which they are responsible. Upon receiving stakeholder comments, the District reviewed suggested changes and, if appropriate, included updates. It is important to note that this is a long-term planning effort, and methodology changes based on short term trends were unlikely to be taken into account. Comments and suggested changes were taken into consideration if they were justifiable, defensible, and supported by complete documentation. The projections contained herein were presented to District staff and the Public Supply Advisory Committee (August 8, 2023).

The District understands and shares stakeholder's concerns of how critically important accurate demand projections are; however, the District must comply with Chapter 373.0361, F.S., which sets forth requirements for regional water supply planning. ("Population projections used for determining public water supply needs must be based upon the best available data. In determining the best available data, the district shall consider the University of Florida's Bureau of Economic and Business Research (BEBR) medium population projections and any population projection data and analysis submitted by a local government pursuant to the public workshop described in subsection if the data and analysis support the local government's comprehensive plan.")

Tables and Figures

Tables 1 through 2 provide permanent and functional future populations for each county. Tables 3 through 19 provide county population and public supply water demand estimates and projections on a countywide basis. Both average year demand and the 1-in-10 year drought demands are reflected in these tables. Table 20 presents county-level demands. Tables 21 and 22 show population and water demands by region and water use caution areas (WUCAs). Lastly, Table 23 summarizes the existing irrigation wells and the exponential growth rate used to project future irrigation wells.

Summary

Overall, for the PS sector, the District is expecting an increase in average demand of 177.2 mgd from 634.5 mgd in 2020 to 811.7 mgd in 2045 for the 16-county area. The 177.2 mgd increase by



2045 is distributed as follows: 34.4 mgd increase in the Heartland Planning Region, 35.9 mgd increase in the Northern Planning Region, 32.2 mgd in the Southern Planning Region, and 74.7 mgd increase in the Tampa Bay Planning Region. Tables 1 through 23 start on page 17 and provide data by county, utility, and planning region.





References

- 1-in-10 year Drought Subcommittee of the Water Planning Coordination Group. *Final Report: 1-in-10-year Drought Requirement in Florida's Water Supply Planning Process.* 1998.
- Central Florida Water Initiative (CFWI), 2025. 2025 Central Florida Water Initiative Regional Water Supply Plan.
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- GIS Associates, Inc., 2022. *Small-Area Population Methodology of the SWFWMD (December 15, 2022)*. Prepared for the Southwest Florida Water Management District (SWFWMD).
- SWFWMD, 2016-2020. Estimated Water Use Reports (for the years 2016-2020). Brooksville, FL.
- SWFWMD, 2023. Summary Rainfall Data by Region. <u>https://www.swfwmd.state.fl.us/resources/data-maps/rainfall-summary-data-region,</u> Brooksville, FL.
- University of Florida Bureau of Economic and Business Research, 2022. *Projections of Florida Population by County.* Gainesville, FL.
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| | | BE | BR Medium Perm | anent Populatio | on ¹ | | | | Permanent Po | pulation in SWFW | /MD ² | |
|--------------|-----------|-----------|-------------------|-------------------|-----------------|-----------|-----------|-----------|-----------------|--------------------|------------------|-----------|
| | | Populatio | on inside and out | side District bou | ındaries. | | | Po | pulation Inside | District boundarie | es only. | |
| County | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 |
| Charlotte | 187,536 | 203,000 | 215,700 | 225,800 | 234,300 | 241,900 | 181,830 | 196,755 | 209,006 | 218,751 | 226,954 | 234,304 |
| Citrus | 153,922 | 162,500 | 169,200 | 174,900 | 179,500 | 183,500 | 153,922 | 162,500 | 169,200 | 174,900 | 179,500 | 183,500 |
| DeSoto | 33,939 | 34,400 | 34,600 | 34,800 | 35,000 | 35,100 | 33,939 | 34,400 | 34,600 | 34,800 | 35,000 | 35,100 |
| Hardee | 25,261 | 25,300 | 25,200 | 25,000 | 24,900 | 24,700 | 25,261 | 25,300 | 25,200 | 25,000 | 24,900 | 24,700 |
| Hernando | 193,832 | 207,600 | 219,000 | 228,300 | 235,900 | 242,300 | 193,832 | 207,600 | 219,000 | 228,300 | 235,900 | 242,300 |
| Highlands | 101,535 | 104,200 | 106,500 | 108,300 | 109,800 | 111,100 | 93,137 | 95,505 | 97,564 | 99,159 | 100,487 | 101,636 |
| Hillsborough | 1,464,879 | 1,595,000 | 1,702,000 | 1,786,700 | 1,857,800 | 1,919,800 | 1,464,879 | 1,595,000 | 1,702,000 | 1,786,700 | 1,857,800 | 1,919,800 |
| Lake | 389,902 | 442,700 | 487,600 | 525,300 | 558,800 | 587,900 | 1,141 | 1,732 | 2,351 | 2,904 | 3,391 | 3,813 |
| Levy | 43,152 | 45,300 | 47,000 | 48,200 | 49,400 | 50,400 | 24,794 | 26,041 | 27,012 | 27,810 | 28,554 | 29,150 |
| Manatee | 402,821 | 445,800 | 481,900 | 511,200 | 536,500 | 558,500 | 402,821 | 445,800 | 481,900 | 511,200 | 536,500 | 558,500 |
| Marion | 375,690 | 403,600 | 426,600 | 444,600 | 459,700 | 472,700 | 124,899 | 137,536 | 147,950 | 156,685 | 164,088 | 170,700 |
| Pasco | 564,388 | 623,300 | 672,400 | 712,800 | 746,700 | 776,300 | 564,388 | 623,300 | 672,400 | 712,800 | 746,700 | 776,300 |
| Pinellas | 960,759 | 979,500 | 994,400 | 1,006,400 | 1,016,500 | 1,025,200 | 960,759 | 979,500 | 994,400 | 1,006,400 | 1,016,500 | 1,025,200 |
| Polk | 733,199 | 810,900 | 877,800 | 932,700 | 979,200 | 1,019,500 | 679,663 | 757,566 | 818,894 | 869,429 | 912,625 | 949,878 |
| Sarasota | 435,101 | 467,700 | 493,300 | 514,000 | 532,000 | 547,900 | 435,101 | 467,700 | 493,300 | 514,000 | 532,000 | 547,900 |
| Sumter | 129,916 | 154,300 | 175,500 | 192,200 | 206,700 | 219,600 | 129,916 | 154,300 | 175,500 | 192,200 | 206,700 | 219,600 |
| Total | 6,195,832 | 6,705,100 | 7,128,700 | 7,471,200 | 7,762,700 | 8,016,400 | 4,988,790 | 5,910,536 | 6,270,277 | 6,561,039 | 6,807,598 | 7,022,380 |

Table 1. Countywide Permanent Population Estimates and Projections

Reference Sources for Countywide Permanent and Permanent Population Projections

¹ 2021-2045 projections are based on The University of Florida Bureau of Economic and Business Research, Projections of Florida Population by County, 2021-2045, Florida Population Studies, Bulletin 192, February 2022 ² Permanent population estimates and projections were generated by GIS Associates. Source File: GISA SWFWMD PSSA Population Summaries, 2022-12-15.xlsx. Tab Name: County & WMD Summary.





| | | Table 2. Coun | tywide Perman | ent and Total | Functional pop | oulation |
|-----------------------|-------------|----------------|------------------|---------------|-------------------------|-----------|
| | | Total Fu | unctional Popula | tion in SWFWI | MD ^{1,2,3,4,5} | |
| | Total Funct | ional Populati | on = Permanent | + Seasonal+ 1 | Fourist + Net C | ommuters |
| County | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 |
| Charlotte | 212,364 | 228,731 | 243,013 | 254,438 | 264,121 | 272,871 |
| Citrus | 167,827 | 177,044 | 184,319 | 190,521 | 195,544 | 199,922 |
| DeSoto | 35,729 | 36,297 | 36,529 | 36,759 | 36,988 | 37,101 |
| Hardee | 25,980 | 26,079 | 25,999 | 25,816 | 25,741 | 25,563 |
| Hernando | 200,486 | 214,720 | 226,606 | 236,409 | 244,506 | 251,387 |
| Highlands | 103,627 | 106,224 | 108,459 | 110,188 | 111,626 | 112,869 |
| Hillsborough | 1,623,370 | 1,758,982 | 1,871,083 | 1,959,337 | 2,033,688 | 2,097,710 |
| Lake ⁴ | 1,141 | 1,732 | 2,351 | 2,904 | 3,391 | 3,813 |
| Levy | 26,297 | 27,599 | 28,620 | 29,465 | 30,249 | 30,885 |
| Manatee⁵ | 478,345 | 527,638 | 568,920 | 602,754 | 632,485 | 658,700 |
| Marion | 131,994 | 145,035 | 155,864 | 164,970 | 172,714 | 179,653 |
| Pasco | 597,017 | 658,896 | 710,484 | 753,095 | 789,013 | 820,522 |
| Pinellas ⁵ | 1,207,570 | 1,226,434 | 1,245,700 | 1,260,566 | 1,273,220 | 1,283,812 |
| Polk ⁴ | 679,663 | 757,566 | 818,894 | 869,429 | 912,625 | 949,878 |
| Sarasota | 521,309 | 555,493 | 584,464 | 608,085 | 628,634 | 646,305 |
| Sumter | 144,439 | 170,649 | 193,407 | 211,356 | 227,050 | 241,118 |
| Total | 6,157,158 | 6,619,120 | 7,004,709 | 7,316,094 | 7,581,597 | 7,812,110 |

Reference Sources for Countywide Permanent in SWFWMD and Functional Population Projections

¹Total functional population comprises permanent population, functional seasonal population, functional tourist, and functional net commuters population.

² 2021 Estimate was generated from the population projections calculated using the latest GIS Associates, Inc.'s population projection model data (December 2022) and the PS_SERVICEAREAS GIS layer (dated: 30MAR2023). Population estimates and projections were adjusted using the 2021 Public Supply Annual Report population served estimate. The 2020 estimate had to be extrapolated using the 2016-2020 growth rate for each utility. The GISA projections are based on The University of Florida Bureau of Economic and Business Research, Projections of Florida Population by County, 2025-2050 With Estimates For 2021. Florida Population ³ The 2025-2045 projections were generated from the latest GIS Associates, Inc.'s population projection model data (December 2022) and the PS_SERVICEAREAS GIS layer (dated: 30MAR2023). Population estimates and projections were adjusted using the 2021 Public Supply Annual Report population served estimate. The GISA projections are based on The University of Florida Population projections served estimate. The GISA projections are based on The University of Florida Bureau of Economic and Business Research, Projection served estimates. The GISA projections are based on The University of Florida Population by County, 2025-2050 With Estimates For 2021. Florida Population Studies, Bulletin

⁴ This total includes estimates and projections from District portion of county from draft 2025-2045 Regional Water Supply Plan for the Central Florida Water Initiative (July 2023).
⁵ For Manatee and Pinellas County, the sum of adjusted functional population exceeds original county total. Thus, county total was recalculated as original county total plus deficit plus GIS Associates Inc.'s population projection model data (December 2022) self-supplied population estimate (ex. 2025 Manatee County Total = 500,308 + 16,048 + 11,282 = 527,638).





TABLE 3. CHARLOTTE COUNTY POPULATION ESTIMATES AND PROJECTIONS

| | | | | 2020 | | | | | | | | | | | |
|------|-----------|--|------------|------------|---------|---------|-----------|---------|---------|-----------|--------|----------|---------|---------|----------------|
| | | | | POPULATION | | | (3) | | | | | | (5) | | |
| | | | | TIMES | | | | | | | PF | ROJECTED | WATER I | DEMANDS | ł. |
| | | | (1) | 2016-2020 | | PROJEC | TED POPUL | ATION | | (4) | | | MGD | | |
| | | | 2020 | GPCD | | | | | | 2016-2020 | | | | | |
| | WUP | | POPULATION | MGD | 2025 | 2030 | 2035 | 2040 | 2045 | AVG GPCD | 2025 | 2030 | 2035 | 2040 | 2045 |
| (6) | DSS | Domestic Self-Supply | 9.563 | 0.622 | 9.925 | 10.153 | 10.865 | 11.342 | 11.761 | 65 | 0.645 | 0.660 | 0.706 | 0.737 | 0.764 |
| (11) | 718 | Gasparilla Island Water Assoc. | 6,150 | 1.109 | 6,208 | 6,276 | 6,344 | 6,415 | 6,491 | 180 | 1.119 | 1.132 | 1.144 | 1.157 | 1.170 |
| | 871 | City of Punta Gorda | 41,761 | 5.464 | 44,624 | 46,928 | 48,512 | 49,507 | 50,316 | 131 | 5.839 | 6.140 | 6.348 | 6.478 | 6.584 |
| | 1512 | Charlotte Harbor Water Assoc. | 4,474 | 0.384 | 4,998 | 5,457 | 5,836 | 6,175 | 6,485 | 86 | 0.429 | 0.468 | 0.500 | 0.529 | 0.556 |
| | 3522 | Charlotte County Utilities / Burnt Store | 7,190 | 0.445 | 8,185 | 9,380 | 9,834 | 10,257 | 10,666 | 62 | 0.507 | 0.581 | 0.609 | 0.635 | 0.661 |
| | 7104 | Charlotte County Utilities | 138,929 | 10.590 | 150,366 | 160,278 | 168,406 | 175,688 | 182,323 | 76 | 11.461 | 12.217 | 12.836 | 13.391 | 13.897 PRMRWSA |
| (9) | 8626 | Homeowners of Alligator Park | 664 | 0.057 | 664 | 665 | 665 | 666 | 666 | 86 | 0.057 | 0.057 | 0.057 | 0.057 | 0.057 |
| (10) | 99913 | El Jobean Water Association | 1,224 | 0.131 | 1,246 | 1,266 | 1,283 | 1,299 | 1,314 | 107 | 0.133 | 0.135 | 0.137 | 0.139 | 0.141 |
| (10) | 99916 | Riverwood Development | 2,409 | 0.258 | 2,514 | 2,610 | 2,694 | 2,772 | 2,848 | 107 | 0.269 | 0.279 | 0.288 | 0.297 | 0.305 |
| (8) | | Additional Irrigation Demand | | 2.355 | | | | | | | 2.536 | 2.695 | 2.821 | 2.929 | 3.026 |
| | Total Cou | inty | 212,364 | 21.414 | 228,731 | 243,013 | 254,438 | 264,121 | 272,871 | | 22.996 | 24.364 | 25.448 | 26.350 | 27.161 |
| (7) | 1-10 Dro | ught Year Demand | | | | | | | | | 24.376 | 25.826 | 26.975 | 27.931 | 28.791 |

Notes:

MGD = million gallons per day

(1) 2020 Estimate was generated using 2016-2020 growth rates from The University of Florida Bureau of Economic and Business Research, Projections of Florida Population by County, 2016-2045, Florida

Population Studies, Bulletin 192, February 2022.

(2) Estimated using average 2016-2020 GPCD, as provided in Table A-1 of the District's reports titled Estimated Water Use, 2016-2020.

(3) Source: Population Projections calculated using GIS Associates, Inc.'s population projection model data and the PS_SERVICEAREAS GIS layer (dated: 30MAR2023). The functional population estimates include seasonal residents, tourists and net commuters, if applicable to the service area.

(4) For utilities with at least 0.1 mgd average annual withdrawal, year 2016-2020 average estimated per capita water use rates, as provided in Table A-1 of the District's annual 'Estimated Water Use Report' for years 2016-2020, were used to project demands. See footnotes 6 and 8 for descriptions of the per capita used for the Domestic Self-Supply and Additional Irrigation Demand.

(5) Computed as projected population multiplied by 2016-2020 average per capita water use.

(6) County residential per capita rate from the District's annual 'Estimated Water Use Report' for years 2016-2020, was used to calculate average estimated 2016-2020 usage, Table A-2. If a county residential per capita rate was not available, the District's 2016-2020 average residential per capita rate was used.

(7) 1-10 Drought Year Demand is calculated as 1.06 x Projected Future Water Use.

(8) Additional Irrigation Demand is defined as water demand from residential irrigation wells utilized by residents that depend upon a centralized system for indoor water needs. It is calculated based on 332 gallons per day per well. (9) This utility has a small general permit and is identified in the PS_SERVICEAREAS layer. The per capita is listed in the permit document.

(10) This service area is a wholesale importer. There is no water use permit associated with this service area. Per capita is assumed to equal to the average county per capita.

(11) Gasparilla Island Water Assoc. (WUP 718): 2020 PSAR Functional population utilized for more accurate representation of utility level growth.





TABLE 4. CITRUS COUNTY POPULATION ESTIMATES AND PROJECTIONS

| | | | | (2) 2020 | | | | | | | | | | | |
|------|------------|---|------------|-------------|---------|---------|-----------|---------|---------|-----------|--------|----------|-----------|---------|--------|
| | | | | POPULATION | | | (3) | | | | | | (5) | | |
| | | | | TIMES | | | | | | | F | PROJECTE | D WATER D | DEMANDS | |
| | | | (1) | 2016-2020 | | PROJEC | TED POPUL | ATION | | (4) | | | (MGD) | | |
| | | | 2020 | GPCD | | | | | | 2016-2020 | | | | | |
| | WUP | | POPULATION | (MGD) | 2025 | 2030 | 2035 | 2040 | 2045 | AVG GPCD | 2025 | 2030 | 2035 | 2040 | 2045 |
| (6) | DSS | Domestic Self-Supply | 57,968 | 5.310 | 61,502 | 64,272 | 66,630 | 68,531 | 70,183 | 92 | 5.634 | 5.887 | 6.103 | 6.277 | 6.429 |
| | 207 | City of Crystal River | 5,681 | 0.746 | 5,768 | 5,865 | 5,949 | 6,022 | 6,088 | 131 | 0.757 | 0.770 | 0.781 | 0.791 | 0.799 |
| | 419 | City of Inverness | 9,096 | 0.974 | 9,448 | 9,725 | 9,962 | 10,153 | 10,319 | 107 | 1.011 | 1.041 | 1.066 | 1.087 | 1.104 |
| (9) | 729 | Citrus Co. Utilities - Point O' Woods | 895 | 0.077 | 901 | 906 | 909 | 912 | 915 | 86 | 0.077 | 0.078 | 0.078 | 0.078 | 0.079 |
| (9) | 872 | Inverness Village | 248 | 0.027 | 248 | 248 | 248 | 248 | 248 | 110 | 0.027 | 0.027 | 0.027 | 0.027 | 0.027 |
| | 1118 | Floral City Water Association Inc | 5,175 | 0.336 | 5,280 | 5,364 | 5,436 | 5,494 | 5,546 | 65 | 0.343 | 0.348 | 0.353 | 0.357 | 0.360 |
| (10) | 1345 | Royal Oaks of Citrus HOA | 437 | 0.044 | 437 | 437 | 437 | 437 | 437 | 100 | 0.044 | 0.044 | 0.044 | 0.044 | 0.044 |
| | 2842 | Citrus Co. Utilities - Citrus Springs/P | i 20,811 | 2.819 | 22,539 | 23,927 | 25,134 | 26,137 | 27,037 | 135 | 3.053 | 3.241 | 3.405 | 3.540 | 3.662 |
| (10) | 4008 | Inverness Park | 238 | 0.017 | 239 | 240 | 241 | 242 | 242 | 70 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 |
| | 4153 | Rolling Oaks Utilities Inc | 11,227 | 1.502 | 11,878 | 12,339 | 12,712 | 12,998 | 13,229 | 134 | 1.590 | 1.651 | 1.701 | 1.740 | 1.770 |
| | 4406 | Homosassa Special Water District | 5,819 | 0.783 | 5,871 | 5,929 | 5,982 | 6,030 | 6,074 | 135 | 0.790 | 0.798 | 0.805 | 0.812 | 0.818 |
| (9) | 4753 | Constate Utilities | 599 | 0.067 | 610 | 619 | 627 | 633 | 638 | 112 | 0.068 | 0.069 | 0.070 | 0.071 | 0.071 |
| | 6691 | Gulf Highway Land Corporation | 584 | 0.061 | 609 | 629 | 646 | 659 | 671 | 104 | 0.064 | 0.066 | 0.067 | 0.069 | 0.070 |
| | 7121 | Citrus Co. Utilities - Charles A. Black | 28,209 | 4.654 | 29,939 | 31,301 | 32,455 | 33,381 | 34,180 | 165 | 4.940 | 5.164 | 5.355 | 5.507 | 5.639 |
| (9) | 7784 | Citrus Co. Utilities - Water Oaks | 202 | 0.014 | 204 | 205 | 206 | 207 | 208 | 71 | 0.014 | 0.015 | 0.015 | 0.015 | 0.015 |
| (10) | 8147 | Oak Pond LLC | 103 | 0.010 | 103 | 103 | 103 | 103 | 103 | 97 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 |
| (10) | 8623 | Gulf Coast RV Resort | 0 | 0.000 | 44 | 84 | 117 | 143 | 165 | 70 | 0.003 | 0.006 | 0.008 | 0.010 | 0.012 |
| | 9097 | Tarawood Utilities LLC | 158 | 0.010 | 160 | 162 | 164 | 165 | 166 | 61 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 |
| (10) | 9532 | Greenbriar One of Citrus Hills | 388 | 0.051 | 388 | 389 | 389 | 389 | 389 | 131 | 0.051 | 0.051 | 0.051 | 0.051 | 0.051 |
| | 9791 | Citrus Co. Utilities - Sugarmill Wood: | s 14,235 | 2.566 | 15,097 | 15,777 | 16,359 | 16,833 | 17,247 | 180 | 2.721 | 2.843 | 2.948 | 3.034 | 3.108 |
| | 11839 | GCP Walden Woods One, LLC and C | 1,021 | 0.152 | 1,021 | 1,021 | 1,021 | 1,022 | 1,022 | 149 | 0.152 | 0.152 | 0.152 | 0.152 | 0.152 |
| | 20230 | Ozello Water Association Inc | 4,734 | 0.382 | 4,757 | 4,778 | 4,794 | 4,807 | 4,817 | 81 | 0.384 | 0.386 | 0.387 | 0.388 | 0.389 |
| (8) | | Additional Irrigation Demand | | 1.078 | | | | | | | 1.137 | 1.184 | 1.223 | 1.256 | 1.284 |
| | Total Coun | ıty | 167,827 | 21.679 | 177,044 | 184,319 | 190,521 | 195,544 | 199,922 | | 22.897 | 23.858 | 24.678 | 25.342 | 25.921 |
| (7) | 1-10 Droug | ght Year Demand | | | | | | | | | 24.271 | 25.290 | 26.159 | 26.863 | 27.476 |
| | | | | | | | | | | | | | | | |

Notes:

MGD = million gallons per day

(1) 2020 Estimate was generated using 2016-2020 growth rates from The University of Florida Bureau of Economic and Business Research, Projections of Florida Population by County, 2016-2045, Florida Population Studies, Bulletin 192, February 2022.

(2) Estimated using average 2016-2020 GPCD, as provided in Table A-1 of the District's reports titled Estimated Water Use, 2016-2020.

(3) Source: Population Projections calculated using GIS Associates, Inc.'s population projection model data and the PS_SERVICEAREAS GIS layer (dated: 30MAR2023). The functional population estimates include seasonal residents, tourists and net commuters, if applicable to the service area.

(4) For utilities with at least 0.1 mgd average annual withdrawal, year 2016-2020 average estimated per capita water use rates, as provided in Table A-1 of the District's annual 'Estimated Water Use Report' for years 2016-2020, were used to project demands. See footnotes 6 and 8 for descriptions of the per capita used for the Domestic Self-Supply and Additional Irrigation Demand.

(5) Computed as projected population multiplied by 2016-2020 average per capita water use.

(6) County residential per capita rate from the District's annual 'Estimated Water Use Report' for years 2016-2020, was used to calculate average estimated 2016-2020 usage, Table A-2. If a county residential per capita rate was not available, the District's 2016-2020 average residential per capita rate was used.

(7) 1-10 Drought Year Demand is calculated as 1.06 x Projected Future Water Use.

(8) Additional Irrigation Demand is defined as water demand from residential irrigation wells utilized by residents that depend upon a centralized system for indoor water needs. It is calculated based on 332 gallons per well per day.

(9) Small general water use permits are not required to submit annual information on their per capita. Consequently, per capita information for the following small general WUPs was obtained as follows:

a) CCU - Point of Woods (WUP# 729): Per capita information obtained from permit issued in 2017.

b) Constate Utilities (WUP# 4753): Per capita information obtained from permit issued in 2017.

c) Inverness Village (WUP# 872): Per capita information was obtained from permit issued in 2022.

d) Citrus Co. Utilities - Water Oaks (WUP# 7784): Per capita and population information was obtained from permit issued in 2021.

e) Gulf Coast RV Resort (WUP# 8623): Per capita information was obtained from permit issued in 2019.

(10) These are small general public supply permits listed in the PS_SERVICEAREAS layer. If available, the permit per capita was used. Otherwise, it was assumed that the per capita was equal to the 2020 unadjusted gross per capita for the county.

REGIONAL WATER SUPPLY PLAN





TABLE 5. DESOTO COUNTY POPULATION ESTIMATES AND PROJECTIONS

| | | | | (2) 2020 | | | | | | | | | | | |
|------------|---------------------------|---|-------------|-------------------|--------|---------|------------|--------|--------|------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|
| | | | | POPULATION | | | (3) | | | | PR | | (5) WATER F | FMANDS | |
| | | | (1) 2020 | 2016-2020 GPCD | | PROJECT | FED POPULA | ATION | | (4) 2016-2020 | | | (MGD) | | |
| | WUP | | POPULATION | (MGD) | 2025 | 2030 | 2035 | 2040 | 2045 | AVG GPCD | 2025 | 2030 | 2035 | 2040 | 2045 |
| (6) | DSS | Domestic Self-Supply | 15,787 | 0.767 | 16,070 | 16,222 | 16,377 | 16,533 | 16,614 | 49 | 0.781 | 0.788 | 0.796 | 0.803 | 0.807 |
| (10) | 3318 | Cross Creek Country Club | 1,264 | 0.056 | 1,264 | 1,264 | 1,264 | 1,264 | 1,264 | 44 | 0.056 | 0.056 | 0.056 | 0.056 | 0.056 |
| (10) | 4725 6483 | DeSoto Village Mobile Home Park | 290 | 0.019 | 290 | 290 | 290 | 290 | 290 | 84 67 | 0.019 | 0.015 | 0.015 | 0.019 | 0.019 |
| (9) (8) | 20457 | DeSoto County Utilities Additional Irrigation Demand | 6,277 | 0.640 0.082 | 6,550 | 6,624 | 6,693 | 6,760 | 6,789 | 102 | 0.667 0.084 | 0.675 0.084 | 0.682 0.085 | 0.689 0.085 | 0.692 PRMRWSA 0.085 |
| (7) | Total Count 1-10 Droug | ly ht Year Demand | 35,729 | 2.577 | 36,297 | 36,529 | 36,759 | 36,988 | 37,101 | | 2.621 2.779 | 2.637 2.796 | 2.653 2.812 | 2.668 2.829 | 2.676 2.836 |

Notes:

MGD = million gallons per day

(1) 2020 Estimate was generated using 2016-2020 growth rates from The University of Florida Bureau of Economic and Business Research, Projections of Florida Population by County, 2016-2045, Florida Population Studies, Bulletin 192, February 2022.

(2) Estimated using average 2016-2020 GPCD, as provided in Table A-1 of the District's reports titled Estimated Water Use, 2016-2020.

(3) Source: Population Projections calculated using GIS Associates, Inc.'s population projection model data and the PS_SERVICEAREAS GIS layer (dated: 30MAR2023). The functional population estimates include seasonal residents, tourists and net commuters, if applicable to the service area.

(4) For utilities with at least 0.1 mgd average annual withdrawal, year 2016-2020 average estimated per capita water use rates, as provided in Table A-1 of the District's annual 'Estimated Water Use Report' for years 2016-2020, were used to project demands. See footnotes 6 and 8 for descriptions of the per capita used for the Domestic Self-Supply and Additional Irrigation Demand.

(5) Computed as projected population multiplied by 2016-2020 average per capita water use.

(6) County residential per capita rate from the District's annual 'Estimated Water Use Report' for years 2016-2020, was used to calculate average estimated 2016-2020 usage, Table A-2. If a county residential per capita rate was not available, the District's 2016-2020 average residential per capita rate was used.

(7) 1-10 Drought Year Demand is calculated as 1.06 x Projected Future Water Use.

 (8) Additional Irrigation Demand is defined as water demand from residential irrigation wells utilized by residents that depend upon a centralized system for indoor water needs. It is calculated based on 332 gallons per well per day.
 (9) This is wholesale permit that imports supply from the PRMRWSA. The County also holds an Industrial/Commercial WUP (#6841) for the DeSoto Annex Correctional Facility which houses an average 1,540 persons. The correctional facility's population has been deducted from the wholesale permit's population

(10) Small general water use permits are not required to submit annual information on their per capita. Consequently, per capita information for the following small general WUPs was obtained as follows:

a) Cross Creek Country Club (WUP# 3318): Population and per capita information on their per capital consequently, per ca

b) DeSoto Village Mobile Home Park (WUP# 6483): Per capita information was obtained from permit issued in 2017.



TABLE 6. HARDEE COUNTY POPULATION ESTIMATES AND PROJECTIONS

| | | | | (2) | | | | | | | | | | | |
|-----|-----------|--------------------------------------|------------|-------------------|--------|---------|--------|--------|--------|------------------|-------|---------|-------|---------|-------|
| | | | | 2020 | | | (2) | | | | | | (5) | | |
| | | | | TIMES | | | (3) | | | | DC | | | | |
| | | | (1) | 2016-2020 GPCD | | PROJECT | | ATION | | (4) 2016-2020 | | OJECTEL | (MGD) | JEMANDS | |
| | WUP | | POPULATION | (MGD) | 2025 | 2030 | 2035 | 2040 | 2045 | AVG GPCD | 2025 | 2030 | 2035 | 2040 | 2045 |
| (6) | DSS | Domestic Self-Supply | 6,432 | 0.274 | 6,428 | 6,333 | 6,149 | 6,050 | 5,863 | 43 | 0.274 | 0.270 | 0.262 | 0.258 | 0.250 |
| | 30 | City Of Bowling Green Municipal Wate | 4,655 | 0.202 | 4,668 | 4,668 | 4,668 | 4,668 | 4,668 | 43 | 0.202 | 0.202 | 0.202 | 0.202 | 0.202 |
| (9) | 2402 | Orange Blossom RV Park | 189 | 0.013 | 189 | 189 | 189 | 189 | 189 | 70 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 |
| | 4461 | City Of Wauchula | 6,830 | 0.686 | 6,848 | 6,852 | 6,857 | 6,862 | 6,868 | 100 | 0.688 | 0.688 | 0.689 | 0.689 | 0.690 |
| (9) | 7022 | MHC Peace River | 27 | 0.001 | 27 | 27 | 27 | 27 | 27 | 20 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| | 7658 | Town Of Zolfo Springs | 2,505 | 0.149 | 2,505 | 2,505 | 2,505 | 2,505 | 2,505 | 59 | 0.149 | 0.149 | 0.149 | 0.149 | 0.149 |
| 10) | 9550 | Hardee Correctional Institution | 1,963 | 0.251 | 1,963 | 1,963 | 1,963 | 1,963 | 1,963 | 128 | 0.251 | 0.251 | 0.251 | 0.251 | 0.251 |
| (9) | 11087 | Florida SKP | 306 | 0.014 | 306 | 306 | 306 | 306 | 306 | 47 | 0.014 | 0.014 | 0.014 | 0.014 | 0.014 |
| (9) | 11180 | Torrey Oaks HOA | 48 | 0.006 | 48 | 48 | 48 | 48 | 47 | 115 | 0.006 | 0.005 | 0.005 | 0.005 | 0.005 |
| | 13026 | Hardee County BOCC | 3,023 | 0.136 | 3,097 | 3,107 | 3,103 | 3,122 | 3,125 | 45 | 0.139 | 0.139 | 0.139 | 0.140 | 0.140 |
| (8) | | Additional Irrigation Demand | | 0.045 | | | | | | | 0.045 | 0.045 | 0.045 | 0.045 | 0.044 |
| | Total Cou | nty | 25,980 | 1.776 | 26,079 | 25,999 | 25,816 | 25,741 | 25,563 | | 1.781 | 1.778 | 1.770 | 1.767 | 1.760 |
| (7) | 1-10 Drou | oht Year Demand | | | | | | | | | 1.888 | 1.885 | 1.877 | 1.873 | 1.865 |

Notes: MGD = million gallons per day (1) 2020 Estimate was generated using 2016-2020 growth rates from The University of Florida Bureau of Economic and Business Research, Projections of Florida Population by County, 2016-2045, Florida Population Studies, Bulletin 192, February 2022. (2) Estimated using average 2016-2020 GPCD, as provided in Table A-1 of the District's reports titled Estimated Water Use, 2016-2020.

(3) Source: Population Projections calculated using GIS Associates, Inc.'s population projection model data and the PS_SERVICEAREAS GIS layer (dated: 30MAR2023). The functional population estimates include seasonal residents tourists and net commuters, if applicable to the service area.

(4) For utilities with at least 0.1 mgd average annual withdrawal, year 2016-2020 average estimated per capita water use rates, as provided in Table A-1 of the District's annual 'Estimated Water Use Report' for years 2016-2020, were used to project demands. See footnotes 6 and 8 for descriptions of the per capita used for the Domestic Self-Supply and Additional Irrigation Demand. (5) Computed as projected population multiplied by 2016-2020 average per capita water use.

(6) County residential per capita rate from the District's annual Estimated Water Use Report' for years 2016-2020, was used to calculate average estimated 2016-2020 usage. Table A-2. If a county residential per capita rate was not (7) 1-10 Drought Year Demand is calculated as 1.06 x Projected Future Water Use.

(8) Additional Irrigation Demand is defined as water demand from residential irrigation wells utilized by residents that depend upon a centralized system for indoor water needs. It is calculated based on 332 gallons per well per day. (9) Small general water use permits are not required to submit annual information on their per capita. Consequently, per capita information for the following small general WUPs was obtained as follows a) Orange Blossom RV Park (WUP# 2402): Per capita information were obtained from permit issued in 2015.

a) MHC Peace River (WUP# 7022): Per capita information was obtained from permit issued in 2021.

b) Florida SKP (WUP# 11087): Per capita information was obtained from permit issued in 2014.
 c) Torrey Oaks HOA (WUP# 11180): Per capita information were obtaind from permit issued in 2016

(10) Although it is a general permit, Hardee Correctional Institution (WUP# 9550) is not required to submit a PSAR. Therefore, population and per captia were taken from permit issued in 2010.

TABLE 7. HERNANDO COUNTY POPULATION ESTIMATES AND PROJECTIONS

| | | | (1) 2020 | (2) 2020 POPULATION TIMES 2016-2020 GPCD | | PROJEC | (3) TED POPULA | TION | | (4) 2016-2020 | Ρ | ROJECTE | (5)) WATER [(MGD) | DEMANDS | |
|-----|------------|------------------------------------|-------------|---|---------|---------|-------------------|---------|---------|------------------|--------|---------|---------------------------|---------|--------|
| | WUP | | POPULATION | (MGD) | 2025 | 2030 | 2035 | 2040 | 2045 | AVG GPCD | 2025 | 2030 | 2035 | 2040 | 2045 |
| (6) | DSS | Domestic Self-Supply | 30,941 | 2.748 | 32,946 | 36,580 | 40,000 | 43,005 | 45,385 | 89 | 2.926 | 3.248 | 3.552 | 3.819 | 4.030 |
| (9) | 1891 | Campers Holiday Association | 543 | 0.027 | 544 | 544 | 545 | 546 | 546 | 50 | 0.027 | 0.027 | 0.027 | 0.027 | 0.027 |
| (9) | 2119 | Imperial Estates | 255 | 0.012 | 255 | 255 | 255 | 255 | 255 | 48 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 |
| (9) | 3273 | Holiday Springs RV Park | 290 | 0.017 | 290 | 290 | 290 | 290 | 290 | 57 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 |
| (9) | 3720 | McGist, Inc. (Frontier Campground) | 364 | 0.017 | 364 | 364 | 364 | 364 | 364 | 46 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 |
| | 5789 | Hernando Co Utilities | 150,338 | 18.957 | 161,595 | 168,812 | 174,121 | 178,277 | 181,941 | 126 | 20.376 | 21.286 | 21.956 | 22.480 | 22.942 |
| | 7627 | City Of Brooksville | 17,315 | 1.329 | 18,284 | 19,317 | 20,390 | 21,323 | 22,158 | 77 | 1.403 | 1.482 | 1.565 | 1.636 | 1.700 |
| (9) | 8443 | Camp-A-Wyle Condominium | 440 | 0.040 | 442 | 444 | 445 | 447 | 449 | 90 | 0.040 | 0.040 | 0.040 | 0.040 | 0.040 |
| (8) | | Additional Irrigation Demand | | 2.992 | | | | | | | 3.204 | 3.382 | 3.528 | 3.649 | 3.752 |
| | Total Cou | inty | 200,486 | 26.137 | 214,720 | 226,606 | 236,409 | 244,506 | 251,387 | | 28.022 | 29.511 | 30.713 | 31.697 | 32.537 |
| (7) | 1-10 Droug | ght Year Demand | | | | | | | | | 29.703 | 31.282 | 32.556 | 33.599 | 34.489 |

<u>Notes:</u> MGD = million gallons per day

(1) (2020 Estimate was generated using 2016-2020 growth rates from The University of Florida Bureau of Economic and Business Research, Projections of Florida Population by County, 2016-2045, Florida Population Studies, Bulletin 192, February 2022.

(2) Estimated using average 2016-2020 GPCD, as provided in Table A-1 of the District's reports titled Estimated Water Use, 2016-2020. (3) Source: Population Projections calculated using GIS Associates. Inc.'s population projection model data and the PS_SERVICEAREAS GIS layer (dated: 30MAR2023). The functional population estimates include seasonal residents, tourists and net commuters, if applicable to the service area.

(4) For utilities with at least 0.1 mgd average annual withdraw al, year 2016-2020 average estimated per capita water use rates, as provided in Table A-1 of the District's annual 'Estimated Water Use Report' for years 2016-2020, were used to project demands. See footnotes 6 and 8 for descriptions of the per capita used for the Domestic Self-Supply and Additional Irrigation Demand.

used to project demands. See toomotes 6 and 6 for descriptions of the per capital used for the Domesci Self-Supply and Additional Irrigation Demand. (6) Computed as projected population multiplied by 2016-2020 average per capita vateruse. (6) County residential per capita rate from the District's annual Estimated Water Use Report for years 2016-2020, was used to calculate average estimated 2016-2020 usage, Table A-2. If a county residential per capita rate was not available, the District's 2016-2020 average residential per capita rate was used. (7) 1-10 Drought Year Demand is calculated as 100 & Projected Future Water Use. (8) Additional Irrigation Demand is defined as water demand from residential triggation wells utilized by residents that depend upon a centralized system for indoor water needs. It is calculated based on 332 gallons per well per day.

(3) Small general water use permits are not required to submit annual information on their per capita. Consequently, per capita information for the following small general WUPs was obtained as follows: a) Campers Holiday Association (WUP# 1891): Per capita information was obtained from permit issued in 2020. b) Imperial Estates (WUP# 2119): Per capita information was obtained from permit issued in 2019.

c) Holiday Springs RV Park (WUP# 3273): Per capita information was obtained from permit issued in 2019. d) Frontier Campground (WUP# 3720): Per capita information was obtained from permit issued in 2015. e) Camp-A-Wyle (WUP# 8443): Per capita information was obtained from permit issued in 2016.



TABLE 8. HIGHLANDS COUNTY POPULATION ESTIMATES AND PROJECTIONS

| | | | | (2) 2020 | | | | | | | | | | | |
|------|------------|-------------------------------------|------------|------------|---------|---------|-----------|---------|---------|-----------|--------|----------|---------|---------|--------|
| | | | 1 | POPULATION | | | (3) | | | | | | (5) | | |
| | | | | TIMES | | | | | | | PF | ROJECTED | WATER [|)EMANDS | |
| | | | (1) | 2016-2020 | | PROJEC | TED POPUL | ATION | | (4) | | | (MGD) | | |
| | | | 2020 | GPCD | | | | | | 2016-2020 | | | | | |
| | WUP | | POPULATION | (MGD) | 2025 | 2030 | 2035 | 2040 | 2045 | AVG GPCD | 2025 | 2030 | 2035 | 2040 | 2045 |
| (6) | DSS | Domestic Self-Supply | 19.615 | 1,236 | 20.648 | 21,432 | 22,111 | 22,668 | 23,143 | 63 | 1.301 | 1.350 | 1.393 | 1.428 | 1.458 |
| | 4167 | HC Waterworks | 1,402 | 0.128 | 1,411 | 1,418 | 1.425 | 1,430 | 1,436 | 92 | 0.129 | 0.130 | 0.130 | 0.131 | 0.131 |
| | 4492 | City of Sebring | 35,549 | 3,901 | 36,525 | 37,290 | 37,916 | 38,427 | 38,856 | 110 | 4.009 | 4.092 | 4,161 | 4.217 | 4.264 |
| (9) | 4670 | Regular Baptist Fellowship, Inc. | 496 | 0.020 | 507 | 515 | 521 | 525 | 528 | 40 | 0.020 | 0.021 | 0.021 | 0.021 | 0.021 |
| | 4980 | Lake Placid Holding Co | 4,631 | 0.313 | 4,827 | 4,985 | 5,117 | 5,227 | 5,322 | 68 | 0.326 | 0.337 | 0.346 | 0.353 | 0.359 |
| | 5270 | Town Of Lake Placid | 7,161 | 0.613 | 7,207 | 7,244 | 7,275 | 7,303 | 7,327 | 86 | 0.617 | 0.620 | 0.623 | 0.625 | 0.627 |
| | 6029 | City Of Avon Park | 22,774 | 1.982 | 22,850 | 23,115 | 23,174 | 23,230 | 23,285 | 87 | 1.988 | 2.011 | 2.016 | 2.021 | 2.026 |
| (11) | 6456 | HC Waterworks | 590 | 0.048 | 592 | 593 | 594 | 595 | 595 | 81 | 0.048 | 0.048 | 0.048 | 0.048 | 0.048 |
| (11) | 6804 | Lake Bonnet Village MHP | 86 | 0.004 | 86 | 86 | 86 | 86 | 86 | 42 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 |
| | 7139 | Buttonwood Bay Utilities | 1,631 | 0.180 | 1,631 | 1,631 | 1,631 | 1,631 | 1,631 | 110 | 0.180 | 0.180 | 0.180 | 0.180 | 0.180 |
| (11) | 9490 | LP Utilities Corporation | 418 | 0.045 | 418 | 418 | 418 | 418 | 418 | 107 | 0.045 | 0.045 | 0.045 | 0.045 | 0.045 |
| (11) | 10926 | Lake Lynn Shores | 30 | 0.005 | 30 | 30 | 30 | 30 | 30 | 150 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 |
| (11) | 10930 | Lake Placid Campground | 62 | 0.002 | 62 | 62 | 62 | 62 | 62 | 37 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| (11) | 11601 | Pine Ridge Park Inc | 139 | 0.007 | 139 | 139 | 139 | 139 | 139 | 51 | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 |
| (11) | 12846 | Tropical Harbor Mobile Home Estates | 815 | 0.092 | 815 | 815 | 815 | 815 | 815 | 113 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 |
| | 13099 | Sun N Lake Of Sebring Impr Dist | 7,986 | 0.669 | 8,216 | 8,412 | 8,586 | 8,743 | 8,890 | 84 | 0.688 | 0.705 | 0.719 | 0.733 | 0.745 |
| (11) | 13272 | Lake Park Village Condo Assoc | 71 | 0.003 | 71 | 71 | 71 | 71 | 71 | 36 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 |
| (10) | 13367 | Silver Lake Utilities, Inc. | 18 | 0.002 | 36 | 51 | 63 | 73 | 82 | 93 | 0.003 | 0.005 | 0.006 | 0.007 | 0.008 |
| (11) | 20470 | Orange Blossom Park | 154 | 0.023 | 154 | 154 | 154 | 154 | 154 | 150 | 0.023 | 0.023 | 0.023 | 0.023 | 0.023 |
| (8) | | Additional Irrigation Demand | | 3.890 | | | | | | | 3.988 | 4.072 | 4.137 | 4.191 | 4.237 |
| | Total Cour | nty | 103,627 | 13.162 | 106,224 | 108,459 | 110,188 | 111,626 | 112,869 | | 13.477 | 13.750 | 13.960 | 14.135 | 14.286 |
| (7) | 1-10 Droug | ht Year Demand | | | | | | | | | 14.286 | 14.575 | 14.798 | 14.983 | 15.143 |
| | | | | | | | | | | | | | | | |

Notes: MGD = million gallons per day

(1) 2020 Estimate was generated using 2016-2020 growth rates from The University of Florida Bureau of Economic and Business Research, Projections of Florida Population by County, 2016-2045, Florida

Population Studies, Bulletin 192, February 2022.

(2) Estimated using average 2016-2020 GPCD, as provided in Table A-1 of the District's reports titled Estimated Water Use, 2016-2020.

(3) Source: Population Projections calculated using GIS Associates, Inc.'s population projection model data and the PS_SERVICEAREAS GIS layer (dated: 30MAR2023). The functional population estimates include seasonal residents, tourists and net commuters, if applicable to the service area.

(4) For utilities with at least 0.1 mgd average annual withdrawal, year 2016-2020 average estimated per capita water use rates, as provided in Table A-1 of the District's annual 'Estimated Water Use Report' for years 2016-2020, were used to project demands. See footnotes 6 and 8 for descriptions of the per capita used for the Domestic Self-Supply and Additional Irrigation Demand. (5) Computed as projected population multiplied by 2016-2020 average per capita water use.

(6) County residential per capita rate from the Districts annual 'Estimated Water Use Report' for years 2016-2020, was used to calculate average estimated 2016-2020 usage, Table A-2. If a county residential per capita rate was not available, the District's 2016-2020 average residential per capita rate was used.

(7) 1-10 Drought Year Demand is calculated as 1.06 x Projected Future Water Use

(9) Additional irrigation Demand is defined as water demand from residential irrigation wells utilized by residents that depend upon a centralized system for indoor water needs. It is calculated based on 332 gallons per well per day. (9) Regular Baptist Fellowship, Inc. (WUP 4670): Per capita information obtained from permit issued in 2018.

(10) This is a small general permit. It is not required to submit an annual per capita report. Per capita information is from the last issued permit. If no per capita information was found in WMIS, the per capita is assumed to equal the average county per capita.

(11) Small general water use permits are not required to submit annual information on their per capita. Consequently, per capita information for the following small general WUPs was obtained as follows:

b) HC Waterworks (WUP# 6456). Per capita information was obtained from permit issued in 2018.
 b) Lake Bonnet Village MHP (WUP# 6804). Per capita information were obtained from permit issued in 2012.
 c) Lake Lynn Shores (WUP#10926). Per capita and population information were obtained from permit issued in 2013.

d) Lake Placid Campground (WUP#10930): Per capita information was obtained from permit issued in 2013. e) Pine Ridge Park Inc (WUP# 11601): Per capita information was obtained from permit issued in 2017.

f) Tropical Harbor Mobile Home Estates (WUP# 12846): Per capita information was obtained from permit issued in 2017.

() Lake Park Village Condo Assoc (WUP# 13272): Per capita information was obtained from permit issued in 2018. h) Orange Blossom Park (WUP# 20470): Per capita information was obtained from permit issued in 2014.

i) LP Utilities Corporation (WUP #9490): Per capita information was obtained from permit issued in 2011.





TABLE 9. HILLSBOROUGH COUNTY POPULATION ESTIMATES AND PROJECTIONS

| | | | | F | ROJECTED | (5) WATER DEM | ANDS | | | | | | | | | | |
|--|---|--|---|--|--|---|--|--|--|--|--|--|--|--|---|--|---|
| | | (1) 2020 | 2016-2020 GPCD | 2025 | PROJEC | TED POPULAT | ION | 22.45 | (4) 2016-2020 | 2025 | 0000 | (MGD) | 20.40 | 20.45 | 000144104 | 1000 | 010000 |
| WUU (6) DSS (9) 1 (9) 435 (9) 435 (9) 169 (7) 1767 (9) 2285 (9) 2962 22850 (9) (9) 2565 (9) 3926 (9) 7643 (9) 7643 (9) 7643 (9) 8468 (9) 8678 (9) 8678 (9) 10043 (9) 12543 (9) 12543 | Domestic Setf-Supply Park Village Hoa Of Ruskin Chula Vista Mobile Home Park The Wildwood Company, Inc. City Of Temple Terrace Brirarvood Mobile Home Park City Of Plant City Utilities Hilsborough Courtly BOCC: San Remo City Of Tampa Water Dept Casa Verde MKC, LLC Sumrise MHC, LLC Brank Yolesort Citrus Knoll MHP Plant Properties Corp. Wilder Corporation River Pain RY Resort C W Utilty Systems. LLC Parktwood Estates Mobile Home Park Bay Hils Wilds Systems, LLC Bonda Bay Famworter Anousing Heptune Valley Mobile Home Park Sumset Manor Hole Bay Pointe Utiltes, Inc. Winderner Utilty Company Homotown Ltitty Company Homotown Ltitty Company Home Valley LCC Winderset Ltity Company Homotown Ltitty Company Homeoners. LLC Hirkeward Partners. LLC Hirkeward Partners. 119 | POPULATION 120,119 120,119 282 690 0,0,333 250 41,988 42,88 730,375 59 44,988 801 41,33 51,285 801 41,315 2,92 2,225 18,255 18,255 19,255 18,255 | (MGD) 8 673 0 017 0 026 0 017 0 026 0 035 6 156 0 028 0 029 0 028 0 028 0 029 0 028 0 008 0 | 2025 141,115 282 690 32,241 250 45,693 229 769,651 1,524 435 801 413 2,148 1,171 474 2,225 180 1,255 185 59 435 801 413 2,448 1,175 1,524 475 801 475 801 475 801 1,524 1,524 1,524 1,524 1,524 1,524 1,525 1,524 1,525 1,524 1,524 1,525 1,524 1,525 1,524 1,525 1,555 1,5 | 2030 176,066 126,066 282 680 0,250 1,526 1,526 4,434 751,905 1,526 4,234 751,905 1,526 801 4,23 59 4,234 4,335 1,171 4,714 2,185 1,175 2,225 1,185 5,66 5,66 8,66 1,175 1 | 2035 212,837 116 282 690 67,116 235 799,180 1,526 801 423 59 423 59 423 59 423 436 801 413 2,148 4,171 474 474 474 474 474 474 2,188 59 50 128 55 51 18 2,795 518 | 2040 248,942 36,930 250 250 36,930 250 250 255 803,180 1,528 423 59 423 59 423 59 423 59 423 438 801 413 2,148 1,315 2,225 180 120 85 56 55 56 567 | 2045 282,818 115 282 285 286,888 285 289,710 1,528 399,710 1,528 423 438 801 1,315 2,148 2,148 2,18 1,315 2,225 2,225 2,225 2,225 2,225 2,225 2,225 2,225 2,225 2,225 2,225 2,518 180 180 2,795 5,18 2,795 5,18 2,795 5,18 2,795 5,18 2,795 5,18 2,795 5,18 2,795 5,18 2,795 5,18 2,795 5,18 2,795 5,18 2,295 2,795 1,295 2,795 1,295 2,795 1,295 2,795 1,295 2,795 1,295 2,795 1,295 2,795 1,295 2,795 1,295 2,795 1,295 2,79 | AVG GPCD 72 73 148 93 145 113 145 113 147 109 150 150 150 150 150 150 150 150 | 2025 10.239 0.017 0.026 0.010 0.026 0.026 0.026 0.028 83.844 0.035 0.009 0.068 0.063 0.005 0.063 0.061 0.063 0.062 0.020 0.068 0.063 0.0119 0.068 0.068 0.02 | 2030 12.712 0.017 0.026 0.026 0.026 0.026 0.031 0.028 86.268 86.268 86.268 86.268 86.268 86.268 0.036 0.036 0.036 0.036 0.036 0.035 0.029 0.060 0.033 0.012 0.029 0.060 0.033 0.0555 0.025 0.029 0.019 0.009 0. | 2035 15.352 0.017 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.021 0.035 0.021 0.035 0.021 0.035 0.021 0.035 0.021 0.035 0.021 0.035 0.026 0.026 0.009 0. | 2040 17,974 0.012 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.021 0.009 0.009 0.006 0.033 0.022 0.009 0.008 0.028 0.028 0.029 0.009 0.008 0.028 0.028 0.021 0.009 0.009 0.008 0.028 0.028 0.028 0.021 0.009 0.009 0.008 0.009 0.008 0.009 0.008 0.009 0.008 0.009 0.008 0.009 0.008 0.009 0.008 0.009 0. | 2045 20,419 0,017 0,017 0,035 12,709 0,028 88,208 88,208 88,208 0,022 0,028 0,028 0,028 0,028 0,028 0,028 0,028 0,029 0,053 0,012 0,053 0,012 0,053 0,012 0,016 0,016 0,016 0,01700,010000000000 | DPCWUCA DPCWUCA DPCWUCA DPCWUCA DPCWUCA DPCWUCA DPCWUCA | NTB NTB NTB NTB NTB NTB NTB NTB NTB NTB | SWUCA SWUCA SWUCA SWUCA SWUCA SWUCA SWUCA SWUCA SWUCA |
| (10443) Windemre Utility Company 2,773 0,251 2,778 2,785 | | | | | | | 465 847,414 cotions of Florida wer (dated: 30M le A-1of the Distu estimated 2016- stem for indoor or per capita inforr average county lisborough Co U | 466 862,802 Population by AR2023). The tot's annual E 2020 usage, T ater needs. k nation was fou per capita. lilities, permit | 93 101 County, 2016-20 functional popula stimated Water Us Table A-2. If a cou is calculated bas nd in WMS, the p | 0.043 75.688 2.651 196.051 7.620 181.997 81.032 45, Florida ation estimates i se Report for ye ation estimates i se Report for ye ation estimates i se reapita is ass | 0 043 06113 2819 207.837 9 011 190.582 85.712 er capita rat er capita rat | 0 043 0 043 0 243 0 245 2 16 982 2 16 982 2 16 982 1 0 949 1 98,787 8 9,026 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0.043 85.482 3.064 224.540 12.725 91.414 5, toutists an alable, the Di | 0.043 87.045 3.161 230.9 13.9 205.1; 93.04 driet emands: sthot's 201 | 10 10 22 50 | NTB NTB | SWUCA |





TABLE 10. LAKE COUNTY POPULATION ESTIMATES AND PROJECTIONS

| | | | | (2) 2020 | | | | | | | | | | | | |
|-----|--------------------------|--|--------------|-------------|----|-------|----------|-----------|-------|----------------------|-----------|-----------------------|-----------------------|----------------|-----------------------|-----------------------|
| | | | PO | PULATION | | | | | | | | | | | | |
| | | | (1) | 2016-2020 | | | PROJECTE | D POPULAT | ION | | | PR | UJECTED | (MGD) | EMANDS | |
| | | | 2020 | GPCD | | | | | | | 2016-2020 | | | (| | |
| | WUP | | POPULATION | (MGD) | | 2025 | 2030 | 2035 | 2040 | 2045 | AVG GPCD | 2025 | 2030 | 2035 | 2040 | 2045 |
| | DSS | Domestic Self-Supply & Small Utilities | 1,141 | 0.140 | 1 | 1,732 | 2,351 | 2,904 | 3,391 | 3 <mark>,81</mark> 3 | NA | 0.210 | 0.290 | 0.360 | 0.420 | 0.470 |
| (3) | Total Coun 1-10 Droug | ty in SWFWMD (all utilities and DSS) ght Year Demand a Utilities (Public Supply) | 1,141 | 0.140 | 1 | 1,732 | 2,351 | 2,904 | 3,391 | 3,813 | | 0.210 0.223 | 0.290 0.307 | 0.360 0.382 | 0.420 0.445 | 0.470 0.498 |
| | CFWI Larg | e Utilities 1-10 Drought Year Demand | NA NA | | NA | NA | NA | NA | N | A | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

Notes:

MGD = million gallons per day

(1) Estimate & projections of domestic self-supplied & small utility population for District portion of county from draft 2025-2045 Regional Water Supply Plan for the Central Florida Water Initiative (July 2023). (1) Estimate & projections of domestic self-supplied & small utility population for District portion of county from draft 2025-2045 Regional Water Supply Plan for the Central Florida Water Initiative (July 2023).

(3) 1-10 Drought Year Demand is calculated as 1.06 x Projected Future Water Use.





TABLE 11. LEVY COUNTY POPULATION ESTIMATES AND PROJECTIONS

| | | | (1) | (2) 2020 POPULATION TIMES 2016-2020 GPCD | | PROJECT | (3) TED POPUL/ | ATION | | (4) | PR | OJECTED | (5)) WATER [(MGD) |)EMANDS | |
|-----|---------------------------|------------------------------|--------------|---|--------------|--------------|-------------------|--------------|--------------|----------|-----------------------|-----------------------|---------------------------|-----------------------|-----------------------|
| | WUP | | POPULATION | (MGD) | 2025 | 2030 | 2035 | 2040 | 2045 | AVG GPCD | 2025 | 2030 | 2035 | 2040 | 2045 |
| (6) | DSS | Domestic Self-Supply | 18,754 | 1.028 | 19,728 | 20,505 | 21,152 | 21,747 | 22,196 | 55 | 1.081 | 1.124 | 1.159 | 1.192 | 1.216 |
| (9) | 7755 | Town Of Yankeetown | 915 1 621 | 0.091 | 918 1 680 | 922 1 706 | 922 1 774 | 922 1 837 | 922 1 886 | 100 | 0.092 | 0.092 | 0.092 | 0.092 | 0.079 |
| (8) | 0000 | Additional Irrigation Demand | 1,021 | 0.019 | 1,000 | 1,700 | 1,114 | 1,007 | 1,000 | 02 | 0.020 | 0.020 | 0.021 | 0.021 | 0.022 |
| (7) | Total Count 1-10 Droug | ty ht Year Demand | 26,297 | 1.986 | 27,599 | 28,620 | 29,465 | 30,249 | 30,885 | | 2.084 2.209 | 2.161 2.291 | 2.221 2.354 | 2.277 2.413 | 2.325 2.465 |

Notes:

MGD = million gallons per day

(1) 2020 Estimate was generated using 2016-2020 growth rates from The University of Florida Bureau of Economic and Business Research, Projections of Florida Population by County, 2016-2045, Florida Population Business Research, Projections of Florida Population by County, 2016-2045, Florida Population by County, 2016-2045, Florida Population Business Research, Projections of Florida Population by County, 2016-2045, Florida

Population Studies, Bulletin 192, February 2022.

(2) Estimated using average 2016-2020 GPCD, as provided in Table A-1 of the District's reports titled Estimated Water Use, 2016-2020.

(3) Source: Population Projections calculated using GIS Associates, Inc.'s population projection model data and the PS_SERVICEAREAS GIS layer (dated: 30MAR2023). The functional population estimates include seasonal residents, tourists and net commuters, if applicable to the service area.

(4) For utilities with at least 0.1 mgd average annual withdrawal, year 2016-2020 average estimated per capita water use rates, as provided in Table A-1 of the District's annual 'Estimated Water Use Report' for years 2016-2020, were used to project demands. See footnotes 6 and 8 for descriptions of the per capita used for the Domestic Self-Supply and Additional Irrigation Demand.

(5) Computed as projected population multiplied by 2016-2020 average per capita water use.

(6) County residential per capita rate from the District's annual 'Estimated Water Use Report' for years 2016-2020, was used to calculate average estimated 2016-2020 usage, Table A-2. If a county residential per capita rate was not available, the District's 2016-2020 average residential per capita rate was used.

(7) 1-10 Drought Year Demand is calculated as 1.06 x Projected Future Water Use.

(8) Additional Irrigation Demand is defined as water demand from residential irrigation wells utilized by residents that depend upon a centralized system for indoor water needs. It is calculated based on 332 gallons per well per day. (9) This is a small general permit. It is nor required to submit an annual per capita report. Per capita information is from the last issued permit. If no per capita information was found in WMIS., the per capita is assumed to equal the average county per capita.

a) Town Of Yankeetown (7755): Per capita information was obtained from the permit issued in 2014.





TABLE 12. MANATEE COUNTY POPULATION ESTIMATES AND PROJECTIONS

| | | | | (2) 2020 | | | | | | | | | | | |
|----------|------------|-----------------------------------|------------|-------------|---------|---------|----------|---------|---------|-----------|--------|----------|--------|---------|------------------|
| | | | | POPULATION | | | (3),(11) | | | | | | (5) | | |
| | | | (1) | 2016-2020 | | PROJEC | | TION | | (4) | P | RUJECTEL | (MGD) | JEMANDS | |
| | | | 2020 | GPCD | | 1110020 | 12010102 | | | 2016-2020 | | | (| | |
| | WUP | | POPULATION | (MGD) | 2025 | 2030 | 2035 | 2040 | 2045 | AVG GPCD | 2025 | 2030 | 2035 | 2040 | 2045 |
| (6),(10) | DSS | Domestic Self-Supply | 10,665 | 0.672 | 11,282 | 11,785 | 12,245 | 12,676 | 13,088 | 63 | 0.711 | 0.742 | 0.771 | 0.799 | 0.825 |
| | 6392 | City Of Bradenton | 74,231 | 6.342 | 79,705 | 82,054 | 83,172 | 83,837 | 84,375 | 85 | 6.810 | 7.010 | 7.106 | 7.163 | 7.209 |
| | 10963 | Town of Longboat Key | 17,753 | 1.675 | 18,103 | 18,310 | 18,518 | 18,740 | 18,976 | 94 | 1.708 | 1.728 | 1.747 | 1.768 | 1.791 |
| (12) | 11424 | Pines Trailer Park | 72 | 0.006 | 72 | 72 | 72 | 72 | 80 | 87 | 0.006 | 0.006 | 0.006 | 0.006 | 0.007 |
| | 12443 | City Of Palmetto | 18,367 | 1.448 | 19,651 | 21,770 | 22,978 | 24,338 | 25,210 | 79 | 1.549 | 1.716 | 1.811 | 1.918 | 1.987 |
| (12) | 13154 | Lazy Acres MHP | 48 | 0.003 | 48 | 48 | 48 | 48 | 48 | 68 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 |
| (9),(10) | 13343 | Manatee County Utility Operations | 357,185 | 32.432 | 398,752 | 434,856 | 465,697 | 492,749 | 516,899 | 91 | 36.207 | 39.485 | 42.285 | 44.742 | 46.934 PRMRWSA |
| (12) | 20235 | ERS/Palmetto Park. | 24 | 0.002 | 24 | 24 | 24 | 24 | 24 | 75 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| (8) | | Additional Irrigation Demand | | 1.868 | | | | | | | 2.061 | 2.222 | 2.354 | 2.470 | 2.573 |
| (11) | Total Cou | inty bh Veer Demend | 478,345 | 44.449 | 527,638 | 568,920 | 602,754 | 632,485 | 658,700 | | 49.056 | 52.915 | 56.086 | 58.871 | 61.330 65.010 |
| (0) | 1-10 Droug | giit rear Demand | | | | | | | | | 52.000 | 30.090 | 35.452 | 02.403 | 05.010 |

Notes:

MGD = million gallons per day

(1) 2020 Estimate was generated using 2016-2020 growth rates from The University of Florida Bureau of Economic and Business Research, Projections of Florida Population by County, 2016-2045, Florida Population Studies, Bulletin 192, February 2022.

(2) Estimated using average 2016-2020 GPCD, as provided in Table A-1 of the District's reports titled Estimated Water Use, 2016-2020.

(3) Source: Population Projections calculated using GIS Associates, Inc.'s population projection model data and the PS_SERVICEAREAS GIS layer (dated: 30MAR2023). The functional population estimates include seasonal residents, tourists and net commuters, if applicable to the service area.

(4) For utilities with at least 0.1 mgd average annual withdrawal, year 2016-2020 average estimated per capita water use rates, as provided in Table A-1 of the District's annual 'Estimated Water Use Report' for years 2016-2020, were used to project demands. See footnotes 6 and 8 for descriptions of the per capita used for the Domestic Self-Supply and Additional Irrigation Demand.

(5) Computed as projected population multiplied by 2016-2020 average per capita water use.

(6) County residential per capita rate from the District's annual 'Estimated Water Use Report' for years 2016-2020, was used to calculate average estimated 2016-2020 usage, Table A-2. If a county residential per capita rate was not available, the District's 2016-2020 average residential per capita rate was used.

(7) 1-10 Drought Year Demand is calculated as 1.06 x Projected Future Water Use.

(8) Additional Irrigation Demand is defined as water demand from residential irrigation wells utilized by residents that depend upon a centralized system for indoor water needs. It is calculated based on 332 gallons per well per day. (9) Manatee County water use permits 5387,7345, and 7470 were consolidated into water use permit number 13343.

(10) The sum of the populations for each utility is greater than the total functional population from GISA. This results in negative domestic self supply populations. County totals adjusted upwards to cover deficit plus domestic self-supply.

(11) This estimates exceeds BEBR High and GISA 2022 functional population estimatates and projections for Manatee County.

(12) This is a small general permit. It is nor required to submit an annual per capita report. Per capita information is from the last issued permit. If no per capita information was found in WMIS, the per capita is assumed to equal the average county per capita.

a) Pines Trailer Park (11424): Per capita information was not available from permit. Per capita is assumed to equal the average county per capita.

b) Lazy Acres MHP (WUP# 13154): Per capita information was obtained from permit issued in 2018.

c) ERS/Palmetto Pak (WUP# 20235): Per capita information was obtained from permit issued in 2021.



2025

TABLE 13. MARION COUNTY POPULATION ESTIMATES AND PROJECTIONS

| | | | | (2) | | | | | | | | | | | |
|-----|-------------|--|------------|------------|---------|---------|-----------|---------|---------|-----------|--------|---------|--------|--------|--------|
| | | | | 2020 | | | | | | | | | | | |
| | | | | POPULATION | | | [3] | | | | - | | (5) | ~~ | ~ |
| | | | | TIMES | | | | | | | P | RUJECTE | UWATER | DEMANU | s |
| | | | (1) | 2016-2020 | | PROJEC | TED POPUL | ATION | | [4] | | | (MGD) | | |
| | VUD. | | | GPCD | 2025 | 2020 | 2025 | 2040 | 2045 | 2016-2020 | 2025 | 2020 | 000F | 0040 | 2045 |
| | WUP | | POPOLATION | (MGD) | 2025 | 2030 | 2035 | 2040 | 2049 | AVGIGPED | 2025 | 2030 | 2039 | 2040 | 2045 |
| (6) | DSS | Domestic Self-Supply | 52,475 | 6.045 | 57,187 | 61,181 | 64,557 | 67,471 | 70,197 | 115 | 6.588 | 7.048 | 7.437 | 7.773 | 8.087 |
| | 1156 | Bay Laurel Community Development D | 15,800 | 3.777 | 19,573 | 22,635 | 25,160 | 27,240 | 28,933 | 239 | 4.678 | 5.410 | 6.014 | 6.511 | 6.916 |
| | 5643 | Utilities Inc of Florida, ATTN: Patrick Fl | 1,013 | 0.150 | 1,017 | 1,020 | 1,023 | 1,025 | 1,027 | 148 | 0.151 | 0.151 | 0.152 | 0.152 | 0.152 |
| (9) | 5731 | Foxwood Mobile Home | 517 | 0.058 | 517 | 517 | 517 | 517 | 517 | 112 | 0.058 | 0.058 | 0.058 | 0.058 | 0.058 |
| (9) | 5746 | Ocala RV Campground | 45 | 0.001 | 45 | 45 | 45 | 45 | 45 | 21 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| | 6151 | Marion Co Utilities Dept | 51,506 | 6.827 | 55,444 | 58,700 | 61,467 | 63,839 | 66,011 | 133 | 7.349 | 7.781 | 8.147 | 8.462 | 8.750 |
| (9) | 6792 | Saddle Oak Club MHC | 736 | 0.101 | 736 | 736 | 736 | 736 | 736 | 137 | 0.101 | 0.101 | 0.101 | 0.101 | 0.101 |
| (9) | 6884 | Marion Utilities Inc | 101 | 0.007 | 121 | 137 | 152 | 164 | 176 | 70 | 0.008 | 0.010 | 0.011 | 0.011 | 0.012 |
| (9) | 8005 | Century Fairfield Village Ltd | 598 | 0.072 | 598 | 598 | 598 | 598 | 598 | 120 | 0.072 | 0.072 | 0.072 | 0.072 | 0.072 |
| | 8020 | Association of Marion Landing Owners | 1,102 | 0.136 | 1,102 | 1,102 | 1,102 | 1,102 | 1,102 | 123 | 0.136 | 0.136 | 0.136 | 0.136 | 0.136 |
| (9) | 8139 | The Falls of Ocala HOA, Inc | 213 | 0.025 | 218 | 221 | 224 | 227 | 229 | 119 | 0.026 | 0.026 | 0.027 | 0.027 | 0.027 |
| | 8339 | City Of Dunnellon | 6,834 | 1.073 | 7,412 | 7,894 | 8,303 | 8,655 | 8,978 | 157 | 1.164 | 1.239 | 1.303 | 1.359 | 1.409 |
| (9) | 9425 | Sweetwater Oaks | 370 | 0.050 | 370 | 370 | 370 | 370 | 370 | 136 | 0.050 | 0.050 | 0.050 | 0.050 | 0.050 |
| (9) | 10110 | The Centers | 129 | 0.013 | 129 | 129 | 129 | 129 | 129 | 100 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 |
| (9) | 10852 | Dogwood Acres MHP | 239 | 0.027 | 239 | 239 | 239 | 239 | 239 | 111 | 0.027 | 0.027 | 0.027 | 0.027 | 0.027 |
| (9) | 11523 | Vestwood MHP | 144 | 0.018 | 144 | 144 | 144 | 144 | 144 | 125 | 0.018 | 0.018 | 0.018 | 0.018 | 0.018 |
| (9) | 20098 | Satake Village Utilities | 83 | 0.013 | 84 | 84 | 84 | 84 | 84 | 150 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 |
| (9) | 20213 | City of Dunnellon - Juliette Falls | 88 | 0.011 | 101 | 112 | 122 | 130 | 138 | 129 | 0.013 | 0.014 | 0.016 | 0.017 | 0.018 |
| (8) | | Additional Irrigation Demand | | 0.690 | | | | | | | 0.758 | 0.815 | 0.862 | 0.903 | 0.939 |
| | Total Co | unty | 131,994 | 19.093 | 145,035 | 155,864 | 164,970 | 172,714 | 179,653 | | 21.223 | 22.982 | 24.456 | 25.702 | 26.798 |
| (7) | 1-10 Drough | t Year Demand | | | | | _ | | | | 22.496 | 24.361 | 25.924 | 27.244 | 28.406 |

Notes:

MGD = million gallons per day

(1) 2020 Estimate was generated using 2016-2020 growth rates from The University of Florida Bureau of Economic and Business Research, Projections of Florida Population by County, 2016-2045, Florida Population Studies, Bulletin 192, February 2022.

(2) Estimated using average 2016-2020 GPCD, as provided in Table A-1 of the District's reports titled Estimated Water Use, 2016-2020.

(3) Source: Population Projections calculated using GIS Associates, Inc.'s population projection model data and the PS_SERVICEAREAS GIS layer (dated: 30MAR2023). The functional population estimates include seasonal residents, tourists and net commuters, if applicable to the service area.

(4) For utilities with at least 0.1 mgd average annual withdrawal, year 2016-2020 average estimated per capita water use rates, as provided in Table A-1 of the District's annual 'Estimated Water Use Report' for years 2016-2020, were used to project demands. See footnotes 6 and 8 for descriptions of the per capita used for the Domestic Self-Supply and Additional Irrigation Demand.

(5) Computed as projected population multiplied by 2016-2020 average per capita water use.

(6) County residential per capita rate from the District's annual 'Estimated Water Use Report' for years 2016-2020, was used to calculate average estimated 2016-2020 usage, Table A-2. If a county residential per capita rate was not available, the District's 2016-2020 average residential per capita rate was used.

(7) 1-10 Drought Year Demand is calculated as 1.06 x Projected Future Water Use.

(8) Additional Irrigation Demand is defined as water demand from residential irrigation wells utilized by residents that depend upon a centralized system for indoor water needs. It is calculated based on 332 gallons per well per day. (9) Small general water use permits are not required to submit annual information on their per capita. Consequently, per capita information for the following small general WUPs was obtained as follows:

a) Foxwood Mobile Home (WUP# 5731): Per capita information were obtained from permit issued in 2017.

b) Ocala RV Campground (WUP# 5746): Per capita information were obtained from permit issued in 2018.

c) Saddle Oak Club MHC (WUP # 6792): Per capita information were obtained from permit issued in 2019.

d) Marion Utilities, Inc. (WUP# 6884): Per capita information were obtained from permit issued in 2020.

e) Century Fairfield Village Ltd (WUP #8005): Per capita information were obtained from permit issued in 2017

f) The Falls of Ocala HOA, Inc (WUP# 8139): Per capita information were obtained from permit issued in 2022. g) Sweetwater Oaks (WUP# 9425): Per capita information was obtained from permit issued in 2020.

h) The Centers (WUP# 10110): Per capita and population information were obtained from permit issued in 2010.

i) Dogwood Acres MHP (WUP# 10852): Per capita information was obtained from permit issued in 2013.

j) Westwood MHP (WUP# 11523): Per capita information was obtained from permit issued in 2018.

k) Satake Village Utilities (WUP# 20098): Per capita information was obtained from permit issued in 2020.

I) City of Dunnellon - Julliet Falls (WUP# 20213): Per capita information obtained from permit issued in 2022.

TABLE 14. PASCO COUNTY POPULATION ESTIMATES AND PROJECTIONS

| | | | an I | 2020 POPULATION TIMES 2016-2020 | | PROJEC | (3) TED POPL | | | (4) | PF | ROJECTE | (5) D VATER (MGD) | DEMANE |)S |
|--------|-------------|--|------------|--|---------|---------|-----------------|---------|---------|-----------|--------|---------|-------------------------|--------|--------|
| | | | 2020 | GPCD | | | | | | 2016-2020 | | | (1100) | | |
| | WUP | | POPULATION | (MGD) | 2025 | 2030 | 2035 | 2040 | 2045 | AVG GPCU | 2025 | 2030 | 2035 | 2040 | 2045 |
| (6) | DSS | Domestic Self-Supply | 104,683 | 7.432 | 128,220 | 148,160 | 165,677 | 182,551 | 197,727 | 71 | 9.104 | 10.519 | 11.763 | 12.961 | 14.039 |
| | 279 | Florida Governmental Utility Author | 4,089 | 0.264 | 4,168 | 4,176 | 4,176 | 4,177 | 4,177 | 65 | 0.269 | 0.270 | 0.270 | 0.270 | 0.270 |
| (10) | 540 | Holiday Gardens Utilities, Inc. | 893 | 0.078 | 912 | 915 | 915 | 915 | 915 | 87 | 0.079 | 0.080 | 0.080 | 0.080 | 0.080 |
| (10) | 543 | Crestridge Utility Corporation | 1,188 | 0.070 | 1,203 | 1,211 | 1,211 | 1,211 | 1,211 | 59 | 0.071 | 0.071 | 0.071 | 0.071 | 0.071 |
| | 590 | Florida Governmental Utility Author | 8,352 | 0.882 | 8,520 | 8,586 | 8,605 | 8,618 | 8,629 | 106 | 0.900 | 0.907 | 0.909 | 0.910 | 0.911 |
| (10) | 923 | Traveler's Rest Resort | 320 | 0.011 | 320 | 321 | 321 | 321 | 321 | 35 | 0.011 | 0.011 | 0.011 | 0.011 | 0.011 |
| | 1631 | City of Dade City | 13,080 | 1.419 | 13,846 | 14,675 | 15,481 | 16,620 | 17,811 | 108 | 1.502 | 1.592 | 1.679 | 1.803 | 1.932 |
| (10) | 2043 | Orangewood Lakes Mobile Home (| 903 | 0.070 | 905 | 906 | 907 | 909 | 910 | 78 | 0.071 | 0.071 | 0.071 | 0.071 | 0.071 |
| (10) | 2319 | Florida Governmental Utility Author | 282 | 0.028 | 290 | 293 | 293 | 293 | 293 | 100 | 0.029 | 0.029 | 0.029 | 0.029 | 0.029 |
| (10) | 2567 | Country- Aire | 240 | 0.027 | 244 | 247 | 250 | 253 | 256 | 113 | 0.028 | 0.028 | 0.028 | 0.029 | 0.029 |
| | 29/8 | Florida Governmental Utility Author | 5,446 | 0.645 | 5,663 | 5,839 | 5,991 | 6,073 | 6,090 | 118 | 0.670 | 0.631 | 0.709 | 0.719 | 0.721 |
| | 3182 | Florida Governmental Utility Author | 30,718 | 2.508 | 32,254 | 33,441 | 34,419 | 35,089 | 35,615 | 82 | 2.633 | 2.730 | 2.810 | 2.865 | 2.908 |
| [10] | 3273 | Holiday Springs RV Park | 290 | 0.017 | 290 | 290 | 290 | 290 | 290 | 57 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 |
| | 3302 | Baker Acres | 610 | 0.025 | 610 | 610 | 610 | 610 | 610 | 41 | 0.025 | 0.025 | 0.025 | 0.025 | 0.025 |
| (10) | 3528 | I Ippecanoe Village Homenowners | 375 | 0.042 | 375 | 375 | 375 | 375 | 375 | E0 | 0.042 | 0.042 | 0.042 | 0.042 | 0.042 |
| cim. | 3030 | Country Aire Service MHD | 3,600 | 0.214 | 3,733 | 3,013 | 3,013 | 3,013 | 3,013 | 150 | 0.025 | 0.227 | 0.025 | 0.227 | 0.227 |
| (10) | 2692 | Country Aire Service MINF City Of Port Pickey | 7 502 | 0.024 | 0 120 | 9 607 | 0 901 | 9 297 | 9.400 | 91 | 0.020 | 0.020 | 0.025 | 0.025 | 0.025 |
| | 4550 | City Of Son Antonio | 2,005 | 0.005 | 2.575 | 2,756 | 2,952 | 2 141 | 2,705 | 50 | 0.055 | 0.030 | 0.123 | 0.104 | 0.196 |
| | 4669 | Hudson Water Works Inc. | 2,400 | 0.626 | 7 467 | 7 776 | 2,352 | 9.261 | 9,540 | 00 | 0.659 | 393.0 | 0.173 | 0.104 | 0.130 |
| | 4734 | Citu Of New Port Bichen | 32 4 8 9 | 3 140 | 35 295 | 37.032 | 37 954 | 38 417 | 38,650 | 97 | 3 412 | 3 580 | 2889 | 3 713 | 3,736 |
| dm. | 5294 | Elorida Villas Mobile Home Park | 119 | 0.012 | 119 | 120 | 120 | 120 | 120 | 99 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 |
| άm. | 5953 | Hacienda I Itilities | 942 | 0.081 | 943 | 944 | 944 | 945 | 945 | 86 | 0.081 | 0.081 | 0.081 | 0.081 | 0.081 |
| (10) | 6040 | Citu of Zenburbills | 28.662 | 2 409 | 30.979 | 32 639 | 33 710 | 34 242 | 34 665 | 84 | 2 604 | 2 744 | 2 834 | 2 878 | 2 914 |
| (10) | 6223 | Florida Governmental Utility Author | 1,146 | 0.080 | 1.180 | 1209 | 1235 | 1269 | 1.301 | 70 | 0.083 | 0.085 | 0.086 | 0.089 | 0.091 |
| άm. | 6230 | Settlers Best Bu Park | 344 | 0.021 | 344 | 344 | 344 | 344 | 344 | 62 | 0.021 | 0.021 | 0.021 | 0.021 | 0.021 |
| noi - | 6640 | Gem Estates | 388 | 0.058 | 395 | 401 | 407 | 407 | 407 | 150 | 0.059 | 0.060 | 0.061 | 0.061 | 0.061 |
| noi - | 6867 | Utilities Inc of Florida | 1.262 | 0.071 | 1.265 | 1.267 | 1.270 | 1.272 | 1.275 | 56 | 0.071 | 0.071 | 0.071 | 0.071 | 0.071 |
| Ì01 | 6881 | Ramblewood Mobile Home Comm | 272 | 0.033 | 272 | 272 | 272 | 272 | 272 | 123 | 0.033 | 0.033 | 0.033 | 0.033 | 0.033 |
| Ì0h | 6982 | Seven Acres BV Park | 20 | 0.001 | 20 | 20 | 20 | 20 | 21 | 40 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| Ìπ) | 7359 | Timber Lake Estates | 1,242 | 0.099 | 1,267 | 1,287 | 1,305 | 1,320 | 1,331 | 80 | 0.101 | 0.103 | 0.104 | 0.106 | 0.107 |
| (10) | 7588 | Cav. Homeowners Cooperative | 584 | 0.047 | 588 | 592 | 595 | 595 | 595 | 80 | 0.047 | 0.047 | 0.048 | 0.048 | 0.048 |
| (10) · | 7718 | Florida Governmental Utility Author | 494 | 0.035 | 526 | 530 | 530 | 530 | 530 | 70 | 0.037 | 0.037 | 0.037 | 0.037 | 0.037 |
| (10) | 7745 | Florida Governmental Utility Author | 649 | 0.079 | 672 | 690 | 692 | 692 | 692 | 122 | 0.082 | 0.084 | 0.084 | 0.084 | 0.084 |
| (10) | 7773 | Barrington Hills MHC | 432 | 0.032 | 432 | 432 | 432 | 432 | 432 | 74 | 0.032 | 0.032 | 0.032 | 0.032 | 0.032 |
| (10) | 7982 | Glendale Villas Condominium Assc | 280 | 0.029 | 324 | 335 | 346 | 368 | 389 | 104 | 0.034 | 0.035 | 0.036 | 0.038 | 0.040 |
| | 7999 | Florida Governmental Utility Author | 2,111 | 0.132 | 2,120 | 2,147 | 2,178 | 2,189 | 2,200 | 63 | 0.133 | 0.134 | 0.136 | 0.137 | 0.138 |
| | 8417 | Florida Governmental Utility Author | 7,864 | 0.403 | 8,211 | 8,247 | 8,247 | 8,247 | 8,247 | 51 | 0.420 | 0.422 | 0.422 | 0.422 | 0.422 |
| (10) | 8491 | Parrish Properties | 469 | 0.015 | 469 | 469 | 469 | 469 | 469 | 33 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 |
| (10) | 8514 | Ramblewood Village | 249 | 0.029 | 253 | 254 | 254 | 254 | 254 | 117 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 |
| (10) | 9183 | Sunburst Rv Park | 311 | 0.030 | 311 | 311 | 311 | 311 | 311 | 97 | 0.030 | 0.030 | 0.030 | 0.030 | 0.030 |
| (10) | 9666 | Southfork Mobile Home Communi | 400 | 0.036 | 400 | 400 | 400 | 400 | 400 | 89 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 |
| (10) | 11082 | Florida Governmental Utility Author | 904 | 0.030 | 958 | 1,004 | 1,047 | 1,087 | 1,124 | 33 | 0.032 | 0.033 | 0.035 | 0.036 | 0.037 |
| | 11863 | Pasco Co Utilities | 321,942 | 34.827 | 350,480 | 375,250 | 395,395 | 410,610 | 423,735 | 108 | 37.914 | 40.594 | 42.773 | 44.419 | 45.839 |
| (9) | 99906 | Arbor Uaks | 429 | 0.036 | 431 | 432 | 432 | 433 | 434 | 83 | 0.036 | 0.036 | 0.036 | 0.036 | 0.036 |
| (9) | 99915 | Urchid Lake Utilities | 688 | 0.057 | 688 | 688 | 688 | 688 | 688 | 83 | 0.057 | 0.057 | 0.057 | 0.057 | 0.057 |
| [8] | | Additional Irrigation Demand | | 4.468 | | | | | | | 4.931 | 5.317 | 5.636 | 5.905 | 6.140 |
| | Total Co | ounty | 597,017 | 61.427 | 658,896 | 710,484 | 753,095 | 789,013 | 820,522 | | 67.512 | 72.610 | 76.795 | 80.258 | 83.285 |
| (7) | 1-10 Drough | ht Year Demand | | | | | | | | | 71.563 | 76.966 | 81.402 | 85.073 | 88.282 |

<u>Notes:</u> MGD = million gallons per day

MED = million gallons per day (1) 2020 Estimate was generated using 2016-2020 growth rates from The University of Florida Bureau of Economic and Business Research, Projections of Florida Population by County, 2016-2045, Florida Population Studies, Bulletin 132, February 2022. (2) Estimated using average 2016-2020 GFCD, as provided in Table A-1 of the Districi's reports tilled Estimated Water Use, 2016-2020. (3) Source- Population Projections calculated using GIS Associates, Inc.'s population projection model data and the PS_SERVICEAREAS GIS layer (dated: 30MAR2023). The functional population estimates include seasonal residents, toutists and net commuters, if applicable to the service area.

tourises and net commuters, it applicable to the service area. (I) For utilities with a lease 01 mag daverage annual withdraw al, year 2016-2020 average estimated per capita avater use rates, as provided in Table A-1 of the District's annual Estimated Water Use Report for years 2016-2020, were used to project demands. See footnotes 5 and 8 for descriptions of the per capita used for the Dismetric Self-Supply and Additional Irrigation Demand. (S) Computed as projected population multiplied by 2016-2020 average per capita aver use. (B) Computed as projected population multiplied by 2016-2020 average per capita aver use. (B) Computed as projected population multiplied by 2016-2020 average per capita aver use. (B) Computed as projected population multiplied by 2016-2020 average per capita aver use. (B) Computed as projected population multiplied by 2016-2020 average per capita aver use. (B) Computed as projected population multiplied by 2016-2020 average per capita aver use. (B) Computed as projected population multiplied by 2016-2020 average per capita aver use. (B) Computed as average extinated for the District's annual Estimated Water Use Report for years 2016-2020, was used to calculate average estimated 2016-2020 usage, Table A-2. If a country residential per capita rate was not available, the District's 2016-2020 average of the district average estimated by a set of the district average estimated 2016-2020 usage, Table A-2. If a country residential per capita rate was not available, the District's 2016-2020 average of the district average estimated by a set of the district average estimated as 10.6 x Projected Future Vister Use. (D) Additional by a set of district average district average estimated by a set of the district average estimated average estimated average estimated by a set of the district average estimated by a set

30

(a) Additional linigation Demand is defined as water demand from residential irrigation wells utilized by residents that depend upon a centralized system for indoor water needs. It is calculated based on 332 gallons per well per day. (3) This service areas is a wholesale importer. There is no water use permit associated with this service area. Per capita is assumed to equal to the average county per capita.

a) Orchid Lake Utilities (39915): Population information obtained from District's 2020 RWSP Public Supply Projections

(10) This is a small general permit. It is not required to submit an annual per capita report. Per capita information is from the last issued permit. If no per capita information was found in WMIS, the per capita is assumed to equal the It of the astrate general permit. No Indergate for Sachus and an inder per togener point residuated in a tort of east sade permit. It no i county average that the indergate togeneral permit issued in 2021.
Ib Creatridge Utilities, LLC (VUP 453): Per capita was obtained from permit issued in 2021.
Ib Creatridge Utilities, LLC (VUP 453): Per capita was obtained from permit issued in 2014.
Ib County average VUP 43021: Per capita was obtained from permit issued in 2018.
Ib Baker Arcser (WUP 4505): Per capita was obtained from permit issued in 2018.
Ib Baker Arcser Sevice MHP (WUP 305): Per capita was obtained from permit issued in 2018.
Ib Baker Arcser Sevice MHP (WUP 305): Per capita was obtained from permit issued in 2018.
Ib Country Jeff Sevice MHP (WUP 305): Per capita was obtained from permit issued in 2018.
I Country Jeff Sevice MHP (WUP 305): Per capita was obtained from permit issued in 2018.
I Country Jeff Sevice MHP (WUP 305): Per capita was obtained from permit issued in 2018.
I Horida Villas Mobile Home Park (WUP# 323): Per capita was obtained from permit issued in 2011.
I Florida Governmental Utility Authority (WUP# 6223): Per capita was obtained from permit issued in 2011.
I Berlind E W Park (WUP# 637): Per capita was obtained from permit issued in 2013.
I Settles Res Riv Park (WUP# 638): Per capita was obtained from permit issued in 2013.
I Settles Res Riv Park (WUP# 638): Per capita was obtained from permit issued in 2013.
I Settles How Riv KUP# 638): Per capita was obtained from permit issued in 2018.
I Country Jeff WUP# 638): Per capita was obtained from permit issued in 2018.
I Settles Res Riv Park (WUP# 638): Per capita was obtained from permit issued in 2018.
I Settles KUV# 80400: Per capita was obtained from permit issued in 2018.
I Settles KUV# 80400: Per capita was obtained from permit issued in 2018.
I Se county ave rage a) Holiday Gardens Utilities, LLC (WUP# 540): Per capita was obtained from permit issued in 2021.

ac) Aqua Utilities Florida Incorporated (WUP# 11082): Per capita was obtained from permit issued in 2017

TABLE 15. PINELLAS COUNTY POPULATION ESTIMATES AND PROJECTIONS

| | | | | (2) | | | | | | | | | | | |
|------|------------|------------------------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|----------|---------|---------|---------|
| | | | | | | | (2) | | | | | | (E) | | |
| | | | | TIMES | | | (3) | | | | | | | | |
| | | | (1) | 2016 2020 | | PPO IEC | | TION | | (4) | | FROJECTE | (MGD) | LINANDS | |
| | | | 2020 | GPCD | | PROJEC | | (IION | | 2016-2020 | | | (1100) | | |
| | WUP | | POPULATION | (MGD) | 2025 | 2030 | 2035 | 2040 | 2045 | AVG GPCD | 2025 | 2030 | 2035 | 2040 | 2045 |
| | | | | (| | | | | | | | | | | |
| (6) | DSS | Domestic Self-Supply | 5,185 | 0.262 | 6,015 | 6,167 | 6,263 | 6,328 | 6,494 | 51 | 0.304 | 0.312 | 0.317 | 0.320 | 0.329 |
| | 742 | City Of Tarpon Springs | 28,778 | 2.560 | 29,552 | 30,165 | 30,987 | 32,508 | 34,351 | 89 | 2.629 | 2.683 | 2.756 | 2.892 | 3.055 |
| | 2980 | City Of Dunedin | 45,738 | 3.575 | 46,002 | 46,196 | 46,361 | 46,649 | 46,947 | 78 | 3.596 | 3.611 | 3.624 | 3.646 | 3.670 |
| | 2981 | City of Clearwater | 143,856 | 10.701 | 145,138 | 145,799 | 146,329 | 146,892 | 147,746 | 74 | 10.797 | 10.846 | 10.885 | 10.927 | 10.991 |
| | 7692 | Town Of Belleair | 5,939 | 0.822 | 6,170 | 6,338 | 6,342 | 6,343 | 6,345 | 138 | 0.854 | 0.877 | 0.877 | 0.878 | 0.878 |
| (9) | 9423 | Southern Comfort MHP | 550 | 0.077 | 550 | 550 | 550 | 550 | 550 | 140 | 0.077 | 0.077 | 0.077 | 0.077 | 0.077 |
| (9) | 10350 | Utilities Inc of Florida | 1,139 | 0.048 | 1,139 | 1,139 | 1,139 | 1,139 | 1,139 | 42 | 0.048 | 0.048 | 0.048 | 0.048 | 0.048 |
| | 10795 | City Of Gulfport | 14,881 | 0.942 | 14,962 | 15,038 | 15,175 | 15,376 | 15,499 | 63 | 0.947 | 0.952 | 0.961 | 0.973 | 0.981 |
| | 11218 | City Of Oldsmar | 17,436 | 1.386 | 17,902 | 18,285 | 18,779 | 19,184 | 19,481 | 79 | 1.423 | 1.453 | 1.492 | 1.525 | 1.548 |
| | 11245 | City of Safety Harbor | 15,667 | 1.400 | 15,956 | 16,255 | 16,612 | 16,880 | 17,574 | 89 | 1.425 | 1.452 | 1.484 | 1.508 | 1.570 |
| | 12351 | City of Pinellas Park | 63,692 | 3.748 | 64,904 | 66,069 | 68,256 | 71,243 | 73,010 | 59 | 3.820 | 3.888 | 4.017 | 4.193 | 4.297 |
| | 20142 | Pinellas County | 515,454 | 38.715 | 521,494 | 526,000 | 530,230 | 534,140 | 537,668 | 75 | 39.169 | 39.507 | 39.825 | 40.119 | 40.384 |
| | 20143 | City of St. Petersburg | 349,253 | 26.614 | 356,650 | 367,698 | 373,542 | 375,987 | 377,008 | 76 | 27.178 | 28.020 | 28.465 | 28.651 | 28.729 |
| (8) | | Additional Irrigation Demand | | 7.741 | | | | | | | 7.862 | 7.986 | 8.081 | 8.162 | 8.230 |
| (10) | Total Cou | nty | 1,207,570 | 98.592 | 1,226,434 | 1,245,700 | 1,260,566 | 1,273,220 | 1,283,812 | | 100.128 | 101.712 | 102.910 | 103.919 | 104.786 |
| (7) | 1-10 Droug | ht Year Demand | | | | | | | | | 106.135 | 107.815 | 109.084 | 110.154 | 111.073 |

Notes: MGD = million gallons per day (1) 2020 Estimate var generated using 2016-2020 growth rates from The University of Florida Bureau of Economic and Business Research, Projections of Florida Population by County, 2016-2045, Florida Population Studies, Bulletin 132, Fabruary 2022. (2) Estimated using average 2016-2020 GFPCD, as provided in Table A-1 of the District's reports titled Estimated Water Use, 2016-2020. (3) Source: Population Projections calculated using GIS Associates, Inc.'s population projection model data and the PS_SERVICEAREAS GIS layer (dated: 30MAR2023). The functional population estimates include seasonal residents, tourists and net commuters, if applicable to the service area.

(4) For utilities with at least 0.1 mgd average annual withdraw al, year 2016-2020 average estimated per capita vater use rates, as provided in Table A-1 of the District's annual "Estimated Water Use Report' for years 2016-2020, were used to project demands. See footnotes 6 and 8 for descriptions of the per capita used for the Domestic Self-Supply and Additional Irrigation Demand. (5) Computed as projected population multiplied by 2016-2020 average per capita water use.

(6) Contry residential per capital rate from the District's annual Estimated Water Use Report for years 2016-2020, was used to calculate average estimated 2016-2020 usage, Table A-2. If a county residential per capita rate was not available, the District's 2016-2020 average residential per capita rate was used. (7) 1-10 Drought Year Demand is calculated as 10.6 Projected Future Water Use. (8) Additional Inigation Demand is defined as water demand from residential inigation wells utilized by residents that depend upon a centralized system for indoor water needs. It is calculated based on 332 gallons per well per day.

(9) This is a small general permit. It is not required to submit an annual per capita report. Per capita information is from the last issued permit. If no per capita information was found in WMIS, the per capita is assumed to equal the (c) This is a similar period permit, it is non-equivable to south an animate per capital report. Per capital non-industrial non-industrial state permit, in average county per capital and consoler that the south and an experiment of the south and the south south and an experiment of the south and the south





TABLE 16. POLK COUNTY POPULATION ESTIMATES AND PROJECTIONS

| | | | | (2) 2020 | | | | | | | | | (4) | | | | | | |
|-----|------------|--|------------|-------------|---------|---------|------------|---------|---------|---------------------|--------|----------|-----------|---------|---------|---------|---------------|--------|------------|
| | | | , | TIMES | | | | | | | | PROJECTE | D WATER D | EMANDS | | | | | |
| | | | (1) | 2016-2020 | | PROJECT | ED POPULAT | ION | | (3) | | | (MGD) | | | | | | |
| | WUP | | POPULATION | (MGD) | 2025 | 2030 | 2035 | 2040 | 2045 | Gross Per Capita | 2025 | 2030 | 2035 | 2040 | 2045 | DPCWUCA | SWUCA | SELFWF | CFWI Large |
| (6) | | Domestic Self-Supply & Small Utility CFWI Large Utilities (Below) | 36,825 | 3.4 | 40,976 | 44,821 | 48,036 | 49,775 | 51,514 | NA | 3.88 | 4.23 | 4.52 | 4.68 | 4.84 | | | | |
| | 341 | City Of Bartow | 25,429 | 3.140 | 28,003 | 30,552 | 33,526 | 36,319 | 38,716 | 123 | 3.44 | 3.76 | 4.12 | 4.47 | 4.76 | | SWUCA | | Yes |
| | 587 | Lelynn RV Resort | 274 | 0.020 | 275 | 275 | 275 | 275 | 275 | 80 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | | Not in a WUCA | | |
| | 645 | City Of Fort Meade | 6,912 | 0.570 | 7,007 | 7,084 | 7,152 | 7,212 | 7,265 | 77 | 0.54 | 0.55 | 0.55 | 0.56 | 0.56 | | SWUCA | | Yes |
| | 1616 | Lake Region Mobile Home Owners Inc | 1,064 | 0.090 | 1,067 | 1,068 | 1,071 | 1,075 | 1,076 | 328 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | | SWUCA | | Yes |
| | 2332 | Town Of Lake Hamilton | 1,100 | 0.300 | 1,688 | 1,102 | 2 109 | 2 371 | 2 577 | 196 | 0.33 | 0.36 | 0.30 | 0.46 | 0.50 | | SWUCA | YES | Yes |
| | 3415 | Orchid Springs Development Corp | 1.087 | 0.070 | 1,122 | 1,139 | 1,139 | 1,139 | 1,139 | 60 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | | SWUCA | | |
| | 4005 | Crooked Lake Park Water Company | 3,087 | 0.260 | 3,255 | 3,422 | 3,579 | 3,718 | 3,860 | 82 | 0.27 | 0.28 | 0.29 | 0.30 | 0.32 | | SWUCA | | |
| | 4607 | City Of Winter Haven | 85,847 | 10.160 | 95,411 | 102,654 | 107,865 | 112,308 | 115,821 | 124 | 11.83 | 12.73 | 13.38 | 13.93 | 14.36 | | SWUCA | YES | |
| | 4658 | City of Lake Wales | 25,357 | 2.670 | 28,118 | 31,036 | 33,947 | 36,814 | 39,705 | 105 | 2.95 | 3.26 | 3.56 | 3.87 | 4.17 | | SWUCA | YES | |
| | 4912 | City Of Lakeland Water Utilities Water Administra | 179,559 | 22.080 | 193,140 | 202,942 | 211,054 | 218,431 | 224,028 | 126 | 24.34 | 25.57 | 26.59 | 27.52 | 28.23 | | SWUCA | | |
| | 5251 | Grenelete Resort LLC | 2,949 | 1.120 | 2,958 | 2,962 | 2,988 | 3,018 | 3,040 | 359 | 1.06 | 1.06 | 1.07 | 1.08 | 1.09 | | SWUCA | 1/50 | |
| | 5/50 | City of Davenport | 11,715 | 1.600 | 15,430 | 16,949 | 18,250 | 19,310 | 20,098 | 140 | 2.25 | 2.47 | 2.00 | 2.62 | 2.93 | | NOT IN A WUCA | VEC | |
| | 5893 | Town of Dundee Public Works Dent | 6 230 | 0.320 | 7 292 | 8 145 | 9 146 | 10 132 | 11 441 | 116 | 0.40 | 0.45 | 1.06 | 1 18 | 1 33 | | SWUCA | VES | |
| | 6023 | North Pointe HOA | 156 | 0.030 | 157 | 157 | 157 | 158 | 158 | 172 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | | SWUCA | 120 | |
| | 6124 | City Of Mulberry | 4,586 | 0.410 | 4,933 | 5,236 | 5,512 | 5,761 | 5,983 | 87 | 0.43 | 0.46 | 0.48 | 0.50 | 0.52 | | SWUCA | | |
| | 6174 | Saddlebag Lake Resort | 695 | 0.100 | 699 | 700 | 701 | 701 | 701 | 133 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | | SWUCA | | |
| | 6505 | Polk County Utilities - NWRSA | 45,892 | 2.870 | 49,725 | 52,751 | 55,790 | 58,571 | 60,887 | 61 | 3.03 | 3.22 | 3.40 | 3.57 | 3.71 | DPCWUCA | SWUCA | | |
| | 6506 | Polk County Utilities -SWRSA | 46,310 | 3.550 | 50,564 | 54,503 | 57,144 | 59,005 | 60,803 | 76 | 3.84 | 4.14 | 4.34 | 4.48 | 4.62 | DPCWUCA | SWUCA | | |
| | 6507 | Polk County Utilities -CRSA | 16,414 | 1.210 | 17,818 | 19,612 | 21,159 | 22,733 | 24,084 | 68 | 1.21 | 1.33 | 1.44 | 1.55 | 1.64 | | SWUCA | 1/50 | |
| | 6500 | Polk County Utilities - SERUSA | 6,294 | 0.640 | 6,437 | 79 224 | 0,704 | 0,040 | 7,000 | 101 | 10.05 | 11.50 | 12.12 | 12.69 | 12.90 | | Not in a WUCA | VEC | |
| | 6624 | City of Lake Alfred | 10.067 | 0.890 | 11 429 | 12 643 | 13 697 | 14 551 | 15 330 | 104 | 1 19 | 1 31 | 1 4 2 | 1.51 | 1 59 | | SWIICA | VES | |
| | 6920 | City of Eagle Lake | 5,251 | 0.520 | 5.843 | 6,534 | 7.315 | 8,107 | 9,542 | 83 | 0.48 | 0.54 | 0.61 | 0.67 | 0.79 | | SWUCA | YES | |
| | 7119 | City of Auburndale | 35,209 | 5.400 | 40,029 | 43,981 | 47,956 | 51,675 | 54,731 | 148 | 5.92 | 6.51 | 7.10 | 7.65 | 8.10 | | SWUCA | YES | |
| | 7187 | CHC VII Ltd Century Realty Fund | 1,081 | 0.200 | 1,083 | 1,083 | 1,083 | 1,083 | 1,083 | 225 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | | SWUCA | | |
| | 7328 | Carefree RV Country Club | 837 | 0.110 | 845 | 846 | 846 | 846 | 848 | 138 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | | SWUCA | | |
| | 7878 | Florida Governmental Utility Authority | 2,200 | 0.140 | 2,242 | 2,281 | 2,300 | 2,311 | 2,311 | 67 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | | Not in a WUCA | | |
| | 8054 | Polk County Utilities - ERUSA | 4,399 | 0.500 | 4,735 | 5,084 | 5,461 | 5,824 | 6,129 | 112 | 0.53 | 0.57 | 0.61 | 0.65 | 0.69 | | SWUCA | YES | |
| | 8344 | S V Utilities Ltd | 641 | 0.130 | 0.951 | 10 702 | 11 594 | 12 272 | 10 000 | 233 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | | SWUCA | | |
| | 8522 | City of Haines City | 36,032 | 5.080 | 46 538 | 52 580 | 58 205 | 62 998 | 66 779 | 43 | 6.84 | 7 73 | 0.50 | 0.55 | 0.55 | | SWIICA | VES | |
| | 8967 | Sweetwater Community LLC | 551 | 0.110 | 552 | 552 | 552 | 552 | 552 | 216 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | | SWUCA | 120 | |
| | 12800 | Hanover Jordans Grove, LLC | 704 | 0.000 | 953 | 979 | 1,008 | 1,035 | 1,108 | 89 | 0.08 | 0.09 | 0.09 | 0.09 | 0.10 | | Not in a WUCA | | |
| | 12964 | Alafia Preserve LLC; Eagle Ridge LLC; and Dona | 0 | 0.000 | 248 | 516 | 764 | 991 | 1,198 | 135 | 0.03 | 0.07 | 0.10 | 0.13 | 0.16 | | SWUCA | | |
| | 13043 | Cypress Lakes Utilities Inc | 1,263 | 0.240 | 1,301 | 1,331 | 1,359 | 1,387 | 1,414 | 168 | 0.22 | 0.22 | 0.23 | 0.23 | 0.24 | | Not in a WUCA | | |
| | | | | | | | | | | | | | | | | | | | |
| | Total Cour | nty in SWFWMD (all utilities and DSS) | 679,663 | 77.860 | 757,566 | 818,894 | 869,429 | 912,625 | 949,878 | | 88.610 | 95.900 | 101.800 | 106.870 | 111.180 | | | | |
| | DPCWUCA | | 92,202 | 6.420 | 100,289 | 107,254 | 112,934 | 117,576 | 121,690 | | 6.870 | 7.360 | 7.740 | 8.050 | 8.330 | | | | |
| | SWUCA | | 560,060 | 63.640 | 617,458 | 663,334 | 704,089 | 740,697 | 772,665 | | 71.440 | 76.760 | 81.500 | 85.790 | 89.460 | | | | |
| | CFWI Larg | e Utilities (Public Supply) | 642,838 | 74.460 | 716,590 | 774,073 | 821,393 | 862,850 | 898,364 | | 84.73 | 91.67 | 97.28 | 102.19 | 106.34 | | | | |
| | 1-10 Droug | ht Year Demand | | | | | | | | | 93.93 | 101.65 | 107.91 | 113.28 | 117.85 | | | | |
| (5) | DPCWUCA | 1-10 Drought Year Demand | | | | | | | | | 7.28 | 7.80 | 8.20 | 8.53 | 8.83 | | | | |
| | CEWILLand | e Utilities 1 10 Drought Year Demond | | | | | | | | | /5./3 | 01.3/ | 103.12 | 108.32 | 94.83 | | | | |
| | 2001 Regio | nal Water Supply Plan Projections | 551 877 | 81 392 | 653 476 | 708 926 | | | | | 96.376 | 104 554 | 103.12 | 100.52 | 112.72 | | | | |
| | Notes: | | 001,011 | 01.002 | 000,.10 | | | | | | 00.010 | | | | | | | | |

MGD = million gallons per day

(1) Estimate & projections of domestic self-supplied & small utility population for District portion of county from draft 2025-2045 Regional Water Supply Plan for the Central Florida Water Initiative (July 2023).

(1) Estimate & projections of domestic self-supplied & small utility population for District portion of county from draft 2025-2045 Regional Water Supply Plan for the Central Florida Water Initiative (July 2023). (3) Unless otherwise noted, gross per capitas are from the draft 2025-2045 Regional Water Supply Plan for the Central Florida Water Initiative (July 2023). (4) For large utilities, projected water demand is calculated as projected population times utility specific gross per capita.

(5) 1-10 Drought Year Demand is calculated as 1.06 x Projected Future Water Use.



TABLE 17. SARASOTA COUNTY POPULATION ESTIMATES AND PROJECTIONS

| | | | | (2) | | | | | | | | | | | |
|------|------------|------------------------------------|------------|------------|---------|---------|------------|---------|---------|-----------|--------|----------|---------|---------|----------------|
| | | | | POPULATION | | | (3) | | | | | | (5) | | |
| | | | | TIMES | | | | | | | P | ROJECTED | WATER [| DEMANDS | |
| | | | (1) | 2016-2020 | | PROJEC | TED POPULA | TION | | (4) | | | (MGD) | | |
| | | | 2020 | GPCD | | | | | | 2016-2020 | | | | | |
| | WUP | | POPULATION | (MGD) | 2025 | 2030 | 2035 | 2040 | 2045 | AVG GPCD | 2025 | 2030 | 2035 | 2040 | 2045 |
| (6) | DSS | Domestic Self-Supply | 43.291 | 2.268 | 53,766 | 63,186 | 72.280 | 80.899 | 87,238 | 52 | 2.817 | 3.311 | 3,787 | 4,239 | 4.571 |
| (-/ | 2923 | City of North Port | 57.037 | 3.410 | 65,650 | 73.045 | 79,578 | 85.672 | 93,019 | 60 | 3.924 | 4.366 | 4,757 | 5.121 | 5.561 PRMRWSA |
| | 4318 | City of Sarasota Public Works | 75,588 | 5.718 | 76,450 | 77,386 | 77,702 | 77,845 | 77,983 | 76 | 5.783 | 5.854 | 5.878 | 5.889 | 5.899 |
| | 4866 | Englewood Water District | 37,801 | 2.777 | 40,129 | 42,162 | 44,118 | 45,565 | 47,010 | 73 | 2.948 | 3.098 | 3.241 | 3.348 | 3.454 |
| | 5393 | City Of Venice | 37,372 | 2.368 | 38,808 | 40,164 | 41,222 | 42,172 | 42,753 | 63 | 2.459 | 2.545 | 2.612 | 2.672 | 2.709 |
| (9) | 5456 | Venice Ranch Mobile Home Estates | 369 | 0.025 | 462 | 533 | 607 | 686 | 736 | 67 | 0.031 | 0.036 | 0.041 | 0.046 | 0.049 |
| | 5807 | Camelot Communities | 1,772 | 0.325 | 1,772 | 1,772 | 1,772 | 1,772 | 1,772 | 183 | 0.325 | 0.325 | 0.325 | 0.325 | 0.325 |
| | 7448 | Royalty Resorts | 1,339 | 0.092 | 1,339 | 1,339 | 1,339 | 1,339 | 1,339 | 69 | 0.092 | 0.092 | 0.092 | 0.092 | 0.092 |
| | 8836 | Sarasota County Board of County Co | 255,701 | 20.659 | 265,958 | 273,709 | 278,292 | 281,501 | 283,265 | 81 | 21.487 | 22.114 | 22.484 | 22.743 | 22.886 PRMRWSA |
| (10) | 99914 | Pluris - South Gate Utilities | 11,039 | 0.892 | 11,157 | 11,168 | 11,176 | 11,183 | 11,190 | 81 | 0.901 | 0.902 | 0.903 | 0.904 | 0.904 |
| (8) | | Additional Irrigation Demand | | 6.379 | | | | | | | 6.797 | 7.152 | 7.441 | 7.692 | 7.909 |
| | Total Cou | nty | 521,309 | 44.913 | 555,493 | 584,464 | 608,085 | 628,634 | 646,305 | | 47.567 | 49.795 | 51.562 | 53.072 | 54.359 |
| (7) | 1-10 Droug | ht Year Demand | - | | | | | | - | | 50.421 | 52.783 | 54.655 | 56.256 | 57.621 |

<u>Notes:</u>

MGD = million gallons per day

(1) 2020 Estimate was generated using 2016–2020 growth rates from The University of Florida Bureau of Economic and Business Research, Projections of Florida Population by County, 2016–2045, Florida Population Studies, Bulletin 192, February 2022.

(2) Estimated using average 2016-2020 GPCD, as provided in Table A-1 of the District's reports titled Estimated Water Use, 2016-2020.

(3) Source: Population Projections calculated using GIS Associates, Inc.'s population projection model data and the PS_SERVICEAREAS GIS layer (dated: 30MAR2023). The functional population estimates include seasonal residents, tourists and net commuters, if applicable to the service area.

(4) For utilities with at least 0.1 mgd average annual withdrawal, year 2016–2020 average estimated per capita water use rates, as provided in Table A-1 of the District's annual 'Estimated Water Use Report' for years 2016–2020, were used to project demands. See footnotes 6 and 8 for descriptions of the per capita used for the Domestic Self-Supply and Additional Irrigation Demand.

(5) Computed as projected population multiplied by 2016-2020 average per capita water use.

(6) County residential per capita rate from the District's annual 'Estimated Water Use Report' for years 2016-2020, was used to calculate average estimated 2016-2020 usage, Table A-2. If a county residential per capita rate was not available, the District's 2016-2020 average residential per capita rate was used.

(7) 1-10 Drought Year Demand is calculated as 1.06 x Projected Future Water Use.

(8) Additional Irrigation Demand is defined as water demand from residential irrigation wells utilized by residents that depend upon a centralized system for indoor water needs. It is calculated based on 332 gallons per well per day. (9) This is a small general permit. It is not required to submit an annual per capita report. Per capita information is from the last issued permit. If no per capita information was found in WMIS, the per capita is assumed to equal the average county per capita.

a) Venice Ranch Mobile Home Estates (WUP# 5456): Per capita information were obtained from permit issued in 2017.

(10) This service areas is a wholesale importer from Sarasota County Utilities (WUP# 8836). There is no water use permit associated with this service area. Per capita is assumed to equal WUP# 8836 per capita.



2025

TABLE 18. SUMTER COUNTY POPULATION ESTIMATES AND PROJECTIONS

| | | | (1) | (2) 2020 POPULATION TIMES 2016-2020 | | PROJEC | (3) TED POPUL | ATION | , | (4) | PI | ROJECTE | , (5) D WATER I (MGD) | DEMANDS | |
|---------------------|----------------------------------|---|----------------------------------|---|---------------------------------|----------------------------------|----------------------------------|----------------------------------|------------------------------------|------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| | WUP | | 2020 POPULATION | GPCD (MGD) | 2025 | 2030 | 2035 | 2040 | 2045 | 2016-2020 AVG GPCD | 2025 | 2030 | 2035 | 2040 | 2045 |
| (6) | DSS 1368 6519 7105 | Domestic Self-Supply Lake Panasoffkee Water Assoc Inc City Of Bushnell | 25,079 4,342 3,508 | 1.705 0.282 0.454 | 20,411 4,982 5,742 | 19,812 5,556 7,788 | 30,138 6,032 9,348 | 40,465 6,398 10,709 | 40,464 6,725 12,024 | 68 65 129 | 1.388 0.323 0.743 | 1.347 0.361 1.007 | 2.049 0.392 1.209 | 2.752 0.415 1.385 | 2.752 0.437 1.555 |
| (9) | 7185 7799 8135 8102 | City Of Webster Cedar Acres, Inc. City Of Wildwood City Mng City of Center Lill | 930 532 14,928 | 0.079 0.066 1.645 | 1,339 564 23,125 | 2,338 564 28,782 | 2,991 564 32,831 | 3,465 564 35,817 | 3,925 564 38,433 | 84 125 110 | 0.071 2.548 | 0.197 0.071 3.171 | 0.252 0.071 3.617 | 0.292 0.071 3.946 | 0.330 |
| (9) (9) | 10488 12434 12584 | City of Coleman Jumper Creek Manor Village Parc Center | 624 66 205 | 0.068 0.041 0.010 0.038 | 669 374 296 | 700 572 308 | 726 614 322 | 2,055 747 630 339 | 2,172 764 645 358 | 65 150 185 | 0.085 0.043 0.056 0.055 | 0.045 0.086 0.057 | 0.047 0.092 0.060 | 0.128 0.049 0.094 0.063 | 0.133 0.050 0.097 0.066 |
| (10) (9) | 13005 13123 20095 20721 | The Villages of Marion and Sumter Florida Grande Motor Coach Resort Southern Motor Coach Resort South Sumter Utility Company | 89,552 1,036 800 15,233 | 22.022 0.138 0.070 1.280 | 90,389 1,036 64 19,107 | 90,616 1,036 343 22,485 | 90,766 1,036 790 25,365 | 90,919 1,036 962 28,448 | 91,083 1,036 1,097 30,995 | 246 133 88 84 | 22.228 0.138 0.006 1.605 | 22.284 0.138 0.030 1.889 | 22.321 0.138 0.070 2.131 | 22.358 0.138 0.085 2.390 | 22.399 0.138 0.097 2.604 |
| (11) (12) (8) | 20901 21031 | Gibson Place Utility Company, LLC Blue Goose Utility Company, LLC Additional Irrigation Demand | 0 0 | 0.000 0.000 0.187 | 1,160 0 | 27,529 19,000 | 53,898 42,750 | 55,360 66,500 | 55,360 82,641 | 71 70 | 0.082 0.000 0.220 | 1.955 1.330 0.250 | 3.827 2.993 0.273 | 3.931 4.655 0.293 | 3.931 5.785 0.311 |
| (7) | Total Cour 1-10 Droug | nty ght Year Demand | 157,950 | 28.084 | 170,649 | 229,229 | 300,107 | 344,413 | 368,285 | | 29.704 31.486 | 34.327 36.387 | 39.658 42.037 | 43.041 45.623 | 44.987 47.687 |

Notes:

MGD = million gallons per day

(1) 2020 Estimate was generated using 2016-2020 growth rates from The University of Florida Bureau of Economic and Business Research, Projections of Florida Population by County, 2016-2045, Florida

Population Studies, Bulletin 192, February 2022.

(2) Estimated using average 2016-2020 GPCD, as provided in Table A-1 of the District's reports titled Estimated Water Use, 2016-2020.

(3) Source: Population Projections calculated using GIS Associates, Inc.'s population projection model data and the PS_SERV/CEAREAS GIS layer (dated: 30MAR2023). The functional population estimates include seasonal residents, tourists and net commuters, if applicable to the service area.

(4) For utilities with at least 0.1 mgd average annual withdrawal, year 2016-2020 average estimated per capita water use rates, as provided in Table A-1 of the District's annual 'Estimated Water Use Report' for years 2016-2020, were used to project demands. See footnotes 6 and 8 for descriptions of the per capita used for the Domestic Self-Supply and Additional Irrigation Demand.

(5) Computed as projected population multiplied by 2016-2020 average per capita water use.

(6) Districtwide residential per capita rate from the District's annual 'Estimated Water Use Report' for years 2016-2020, was used to calculate average estimated 2016-2020 usage, Table A-2.

(7) 1-10 Drought Year Demand is calculated as 1.06 x Projected Future Water Use.

(8) Additional Irrigation Demand is defined as water demand from residential irrigation wells utilized by residents that depend upon a centralized system for indoor water needs. It is calculated based on 332 gpd per well.

(9) Small general water use permits are not required to submit annual information on their per capita. Consequently, per capita information for the following small general WUPs was obtained as follows:

a) Cedar Acres (WUP# 7799): Per capita information obtained from permit issued in 2016.

b) City of Coleman (WUP# 10488): Per capita information was obtained from permit issued in 2012.

c) Jumper Cree Manor (WUP# 12434): Per capita information were obtained from permit issued in 2013.

d) Southern Motor Coach Resort (WUP# 20095): Population and per capita information were obtained from permit issued in 2020.

(10) Florida Grande Motor Coach Resort (WUP# 13123): Population and per capita information were obtainted from permit issued in 2023.

(11) Gibson Place Utility Company (WUP# 20901): Population and per capita information were obtained from permit issued in 2023.

(12) Blue Goose Utility Company (WUP# 21031): Population and per capita information were obtained from permit issued in 2024.



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TABLE 19. DISTRICT TOTAL POPULATION ESTIMATES AND WATER DEMAND PROJECTIONS

| | | | (2) | | | | | | | | | | | | |
|-----|------------------------------|------------|------------|-----------|-----------|-------------|-----------|-----------|-----------|---------|----------|-----------|---------|---------|--|
| | | | 2020 | | | | | | | | | | | | |
| | | | POPULATION | | | (3) | | | | | | (5) | | | |
| | | | TIMES | | | | | | | 1 | PROJECTE | D WATER I | DEMANDS | | |
| | | (1) | 2016-2020 | | PROJEC | CTED POPUL/ | ATION | | (4) | | | (MGD) | | | |
| | | 2020 | GPCD | | | | | | 2016-2020 | | | | | | |
| | | POPULATION | (MGD) | 2025 | 2030 | 2035 | 2040 | 2045 | AVG GPCD | 2025 | 2030 | 2035 | 2040 | 2045 | |
| (6) | Domestic Self-Supply | 558,522 | 42.582 | 628,649 | 709,027 | 798,020 | 882,373 | 948,498 | 68 | 47.882 | 53.840 | 60.329 | 66.431 | 71.286 | |
| | Utilities | 5,612,147 | 557.640 | 5,990,471 | 6,331,504 | 6,606,824 | 6,816,586 | 6,990,779 | 98 | 598.668 | 632.783 | 659.982 | 681.121 | 698.702 | |
| (8) | Additional Irrigation Demand | | 34.240 | | | | | | | 36.294 | 38.042 | 39.459 | 40.665 | 41.713 | |
| | Total District | 6,170,669 | 634.462 | 6,619,120 | 7,040,532 | 7,404,844 | 7,698,959 | 7,939,277 | | 682.844 | 724.664 | 759.770 | 788.217 | 811.700 | |
| (7) | 1-10 Drought Year Demand | | | | | | | | | 723.814 | 768.144 | 805.356 | 835.510 | 860.403 | |

Notes:

MGD = million gallons per day

(1) 2020 Estimate was generated using 2016-2020 growth rates from The University of Florida Bureau of Economic and Business Research, Projections of Florida Population by County, 2016-2045, Florida

Population Studies, Bulletin 192, February 2022.

(2) Estimated using average 2016-2020 GPCD, as provided in Table A-1 of the District's reports titled Estimated Water Use, 2016-2020.

(3) Source: Population Projections calculated using GIS Associates, Inc.'s population projection model data and the PS_SERVICEAREAS GIS layer (dated: 30MAR2023). The functional population estimates include seasonal residents, tourists and net commuters, if applicable to the service area.

used to project demands. See footnotes 6 and 8 for descriptions of the per capita used for the Domestic Self-Supply and Additional Irrigation Demand.

(5) Computed as projected population multiplied by 2016–2020 average per capita water use.

available, the District's 2016-2020 average residential per capita rate was used.

(7) 1-10 Drought Year Demand is calculated as 1.06 x Projected Future Water Use.

(8) Additional Irrigation Demand is defined as water demand from residential irrigation wells utilized by residents that depend upon a centralized system for indoor water needs. It is calculated based on 332 gpd per well.

See table named "IRRIGATION WELL TYPES LESS THAN 5" WITHIN SWFWMD's PSSAs AND OUTSIDE WUP CONTROL AREAS" created by R.Pearson and K.Maze (File: Additional_Irrigation_Demand_2025RWSP)





TABLE 20. DISTRICT TOTAL PUBLIC SUPPLY WATER DEMAND PROJECTIONS BY COUNTY (Includes All Utilities and Domestic Self Supply)

| County | 202 | 20 | 202 | 25 | 20 | 30 | 203 | 35 | 20/ | 40 | 20/ | 45 | Chang Dem | ge in and | % Cha | ange |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------------|--------------|--------|--------|
| | Avg | 1-10 | Avg | 1-10 | Avg | 1-10 |
| Charlotte | 21.414 | 22.699 | 22.996 | 24.376 | 24.364 | 25.826 | 25.448 | 26.975 | 26.350 | 27.931 | 27.161 | 28.791 | 5.747 | 6.092 | 26.8% | 26.8% |
| Citrus | 21.679 | 22.980 | 22.897 | 24.271 | 23.858 | 25.290 | 24.678 | 26.159 | 25.342 | 26.863 | 25.921 | 27.476 | 4.242 | 4.496 | 19.6% | 19.6% |
| De Soto | 2.577 | 2.732 | 2.621 | 2.779 | 2.637 | 2.796 | 2.653 | 2.812 | 2.668 | 2.829 | 2.676 | 2.836 | 0.098 | 0.104 | 3.8% | 3.8% |
| Hardee | 1.776 | 1.882 | 1.781 | 1.888 | 1.778 | 1.885 | 1.770 | 1.877 | 1.767 | 1.873 | 1.760 | 1.865 | -0.016 | -0.017 | -0.9% | -0.9% |
| Hernando | 26.137 | 27.706 | 28.022 | 29.703 | 29.511 | 31.282 | 30.713 | 32.556 | 31.697 | 33.599 | 32.537 | 34.489 | 6.400 | 6.784 | 24.5% | 24.5% |
| Highlands | 13.162 | 13.951 | 13.477 | 14.286 | 13.750 | 14.575 | 13.960 | 14.798 | 14.135 | 14.983 | 14.286 | 15.143 | 1.124 | 1.191 | 8.5% | 8.5% |
| Hillsborough | 171.172 | 181.443 | 184.954 | 196.051 | 196.072 | 207.837 | 204.700 | 216.982 | 211.830 | 224.540 | 217.839 | 230.910 | 46.667 | 49.467 | 27.3% | 27.3% |
| Lake | 0.140 | 0.148 | 0.210 | 0.223 | 0.290 | 0.307 | 0.360 | 0.382 | 0.420 | 0.445 | 0.470 | 0.498 | 0.330 | 0.350 | 235.7% | 235.7% |
| Levy | 1.986 | 2.105 | 2.084 | 2.209 | 2.161 | 2.291 | 2.221 | 2.354 | 2.277 | 2.413 | 2.325 | 2.465 | 0.340 | 0.360 | 17.1% | 17.1% |
| Manatee | 44.449 | 47.116 | 49.056 | 52.000 | 52.915 | 56.090 | 56.086 | 59.452 | 58.871 | 62.403 | 61.330 | 65.010 | 16.881 | 17.894 | 38.0% | 38.0% |
| Marion | 19.093 | 20.239 | 21.223 | 22.496 | 22.982 | 24.361 | 24.456 | 25.924 | 25.702 | 27.244 | 26.798 | 28.406 | 7.705 | 8.167 | 40.4% | 40.4% |
| Pasco | 61.427 | 65.113 | 67.512 | 71.563 | 72.610 | 76.966 | 76.795 | 81.402 | 80.258 | 85.073 | 83.285 | 88.282 | 21.858 | 23.169 | 35.6% | 35.6% |
| Pinellas | 98.592 | 104.507 | 100.128 | 106.135 | 101.712 | 107.815 | 102.910 | 109.084 | 103.919 | 110.154 | 104.786 | 111.073 | 6.194 | 6.566 | 6.3% | 6.3% |
| Polk | 77.860 | 82.532 | 88.610 | 93.927 | 95.900 | 101.654 | 101.800 | 107.908 | 106.870 | 113.282 | 111.180 | 117.851 | 33.320 | 35.319 | 42.8% | 42.8% |
| Sarasota | 44.913 | 47.608 | 47.567 | 50.421 | 49.795 | 52.783 | 51.562 | 54.655 | 53.072 | 56.256 | 54.359 | 57.621 | 9.446 | 10.013 | 21.0% | 21.0% |
| Sumter | 28.084 | 29.769 | 29.704 | 31.486 | 34.327 | 36.387 | 39.658 | 42.037 | 43.041 | 45.623 | 44.987 | 47.687 | 16.904 | 17.918 | 60.2% | 60.2% |
| Total | 634.462 | 672.530 | 682.844 | 723.814 | 724.664 | 768.144 | 759.770 | 805.356 | 788.217 | 835.510 | 811.700 | 860.403 | 177.239 | 187.873 | 27.9% | 27.9% |





TABLE 21. DISTRICT TOTAL POPULATION PROJECTIONS BY REGION (Includes all Utilities and Domestic Self Supply)

| Water Use by Planning Region | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 | Change 2020-2045 | % Change |
|----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|---------------------|----------|
| Heartland Planning Region | 809,270 | 889,869 | 953,352 | 1,005,433 | 1,049,992 | 1,088,310 | 279,040 | 34% |
| Northern Planning Region | 685,695 | 736,779 | 826,989 | 924,376 | 990,818 | 1,033,945 | 348,250 | 51% |
| Southern Planning Region | 1,247,747 | 1,348,159 | 1,432,925 | 1,502,036 | 1,562,228 | 1,614,977 | 367,230 | 29% |
| Tampa Bay Planning Region | 3,427,957 | 3,644,312 | 3,827,266 | 3,972,998 | 4,095,922 | 4,202,045 | 774,088 | 23% |
| Districtwide | 6,170,669 | 6,619,120 | 7,040,532 | 7,404,844 | 7,698,959 | 7,939,277 | 1,768,608 | 29% |
| Central Florida Water Initiative | | | | | | | | |
| (CFWI) | 680,804 | 759,298 | 821,245 | 872,333 | 916,016 | 953,691 | 272,887 | 40% |
| Dover Plant City Water Use | | | | | | | | |
| Caution Area (DWUCA) | 138,814 | 150,605 | 166,521 | 184,674 | 200,741 | 212,999 | 74,185 | 53% |
| North Central Florida | | | | | | | | |
| Coordination Area (NCFCA) | 289,945 | 315,684 | 385,093 | 465,077 | 517,127 | 547,938 | 257,994 | 89% |
| Southern Water Use Caution | | | | | | | | |
| Area (SWUCA) | 2,623,695 | 2,852,362 | 3,028,919 | 3,171,328 | 3,291,819 | 3,392,989 | 769,293 | 29% |

Notes:

Planning Regions:

Heartland Planning Region = Hardee, Highlands, Polk

Northern Planning Region = Citrus, Hernando, Lake, Levy, Marion, Sumter

Southern Planning Region = Charlotte, DeSoto, Manatee, Sarasota

Tampa Bay Planning Region = Hillsborough, Pasco, Pinellas





TABLE 22. DISTRICT TOTAL WATER DEMAND PROJECTIONS BY REGION (Includes All Utilities and Domestic Self Supply)

| Water Use by Planning | 20 |)20 | 202 | 25 | 20 |)30 | 203 | 15 | 20 | 40 | 2 | 2045 | Change i | n Demand | % Ch | ange |
|--|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|----------|----------|------|------|
| Region | Avg | 1-in-10 | Avg | 1-in-10 | Avg | 1-10 |
| Heartland Planning Region | 92.8 | 98.4 | 103.9 | 110.1 | 111.4 | 118.1 | 117.5 | 124.6 | 122.8 | 130.1 | 127.2 | 134.9 | 34.4 | 36.5 | 37% | 37% |
| Northern Planning Region | 97.1 | 102.9 | 104.1 | 110.4 | 113.1 | 119.9 | 122.1 | 129.4 | 128.5 | 136.2 | 133.0 | 141.0 | 35.9 | 38.1 | 37% | 37% |
| Southern Planning Region | 113.4 | 120.2 | 122.2 | 129.6 | 129.7 | 137.5 | 135.7 | 143.9 | 141.0 | 149.4 | 145.5 | 154.3 | 32.2 | 34.1 | 28% | 28% |
| Tampa Bay Planning Region | 331.2 | 351.1 | 352.6 | 373.7 | 370.4 | 392.6 | 384.4 | 407.5 | 396.0 | 419.8 | 405.9 | 430.3 | 74.7 | 79.2 | 23% | 23% |
| Districtwide | 634.5 | 672.5 | 682.8 | 723.8 | 724.7 | 768.1 | 759.8 | 805.4 | 788.2 | 835.5 | 811.7 | 860.4 | 177.2 | 187.9 | 28% | 28% |
| Central Florida Water Initiative (CFWI) | 78.0 | 82.7 | 88.8 | 94.1 | 96.2 | 102.0 | 102.2 | 108.3 | 107.3 | 113.7 | 111.7 | 118.3 | 33.7 | 35.7 | 43% | 43% |
| Dover Plant City Water Use Caution Area (DWUCA) | 13.1 | 13.8 | 14.1 | 14.9 | 15.9 | 16.8 | 18.1 | 19.2 | 20.1 | 21.3 | 21.5 | 22.8 | 8.5 | 9.0 | 65% | 65% |
| Northern Tampa Bay (NTB) Water Use Caution Area | 319.3 | 338.5 | 339.0 | 359.3 | 354.1 | 375.4 | 365.4 | 387.3 | 374.2 | 396.7 | 381.6 | 404.5 | 62.3 | 66.0 | 19% | 19% |
| Southern Water Use Caution Area | 261.5 | 277.2 | 285.4 | 302.5 | 302.9 | 321.0 | 317.0 | 336.0 | 328.9 | 348.6 | 338.8 | 359.2 | 77.3 | 82.0 | 30% | 30% |

Notes:

Planning Regions:

Heartland Planning Region = Hardee, Highlands, Polk

Northern Planning Region = Citrus, Hernando, Lake, Levy, Marion, Sumter

Southern Planning Region = Charlotte, DeSoto, Manatee, Sarasota

Tampa Bay Planning Region = Hillsborough, Pasco, Pinellas



2025

Table 23. Residential Irrigation Well Data

| IRRIGATION WELL TYPES LESS THAN 5" WITHIN SWFWMD'S PSSAs AND OUTSIDE WUP CONTROL AREAS (1) | | | | | | | | | | | | | | | |
|--|---------------------------|-----------|---------------------------|--|-----------------|---|-----------------|--|-----------------|--|-----------------|--|-----------------|--|-----------------|
| | Functional Population (2) | | 2020-2025 | 2020 332 gpd 2020 Irrigation Wells | | 2025 332 gpd 2025 Irrigation Well Estimates | | 2030 332 gpd 2030 Irrigation Wells | | 2035 332 gpd 2035 Irrigation Wells | | 2040 332 gpd 2040 Irrigation Wells | | 2045 332 gpd 2045 Irrigation Wells | |
| | | | Annual Exponential Pop | | | | | | | | | | | | |
| | 2020 | 2025 | Growth Rate (3) | # Wells | Withdrawl (mgd) | # Wells | Withdrawl (mgd) | # Wells | Withdrawl (mgd) | # Wells | Withdrawl (mgd) | # Wells | Withdrawl (mgd) | # Wells | Withdrawl (mgd) |
| Charlotte | 212,364 | 228,731 | 0.01496 | 7,093 | 2.355 | 7,640 | 2.536 | 8,117 | 2.695 | 8,498 | 2.821 | 8,822 | 2.929 | 9,114 | 3.026 |
| Citrus | 167,827 | 177,044 | 0.01075 | 3,246 | 1.078 | 3,424 | 1.137 | 3,565 | 1.184 | 3,685 | 1.223 | 3,782 | 1.256 | 3,867 | 1.284 |
| DeSoto | 35,729 | 36,297 | 0.00316 | 248 | 0.082 | 252 | 0.084 | 254 | 0.084 | 255 | 0.085 | 257 | 0.085 | 258 | 0.085 |
| Hardee | 25,980 | 26,079 | 0.00076 | 136 | 0.045 | 137 | 0.045 | 136 | 0.045 | 135 | 0.045 | 135 | 0.045 | 134 | 0.044 |
| Hernando | 200,486 | 214,720 | 0.01381 | 9,012 | 2.992 | 9,652 | 3.204 | 10,186 | 3.382 | 10,627 | 3.528 | 10,991 | 3.649 | 11,300 | 3.752 |
| Highlands | 103,627 | 106,224 | 0.00496 | 11,718 | 3.890 | 12,012 | 3.988 | 12,264 | 4.072 | 12,460 | 4.137 | 12,623 | 4.191 | 12,763 | 4.237 |
| Hillsborough | 1,623,370 | 1,758,982 | 0.01618 | 7,368 | 2.446 | 7,984 | 2.651 | 8,492 | 2.819 | 8,893 | 2.952 | 9,230 | 3.064 | 9,521 | 3.161 |
| Lake | 1,141 | 2,088 | 0.12845 | 0 | NA | 0 | NA | 0 | NA | 0 | NA | 0 | NA | 0 | NA |
| Levy | 26,297 | 27,599 | 0.00972 | 56 | 0.019 | 59 | 0.020 | 61 | 0.020 | 63 | 0.021 | 64 | 0.021 | 66 | 0.022 |
| Manatee | 478,345 | 527,638 | 0.01981 | 5,627 | 1.868 | 6,207 | 2.061 | 6,692 | 2.222 | 7,090 | 2.354 | 7,440 | 2.470 | 7,749 | 2.573 |
| Marion | 131,994 | 145,035 | 0.01902 | 2,078 | 0.690 | 2,283 | 0.758 | 2,454 | 0.815 | 2,597 | 0.862 | 2,719 | 0.903 | 2,828 | 0.939 |
| Pasco | 597,017 | 658,896 | 0.01992 | 13,457 | 4.468 | 14,852 | 4.931 | 16,015 | 5.317 | 16,975 | 5.636 | 17,785 | 5.905 | 18,495 | 6.140 |
| Pinellas | 1,207,570 | 1,226,434 | 0.00310 | 23,317 | 7.741 | 23,681 | 7.862 | 24,053 | 7.986 | 24,340 | 8.081 | 24,585 | 8.162 | 24,789 | 8.230 |
| Polk | 679,663 | 841,409 | 0.04362 | 8,661 | NA | 9,596 | NA | 10,377 | NA | 11,011 | NA | 11,552 | NA | 12,021 | NA |
| Sarasota | 521,309 | 555,493 | 0.01278 | 19,214 | 6.379 | 20,474 | 6.797 | 21,542 | 7.152 | 22,412 | 7.441 | 23,170 | 7.692 | 23,821 | 7.909 |
| Sumter | 144,439 | 170,649 | 0.03391 | 562 | 0.187 | 664 | 0.220 | 753 | 0.250 | 822 | 0.273 | 883 | 0.293 | 938 | 0.311 |
| Total (6) | 6,157,158 | 6,703,319 | | 111,793 | 34.240 | 118,915 | 36.294 | 124,961 | 38.042 | 129,864 | 39.459 | 134,037 | 40.665 | 137,663 | 41.713 |

Notes:

(1) Additional Irrigation Demand is defined as water demand from residential irrigation wells utilized by residents that depend

upon a centralized system for indoor water needs. Demand is calculated based on 332 gallons per day per well

(Determination of Landscape Irrigation Water Use in Southwest Florida, May 31, 2018, Michael Dukes & Mackenzie Boyer).

(2) Countywide permanent and total functional population in SWFWMD.

(3) 2020-2025 population growth rate used to estimate 2025-2045 well count.

(4) Analysis of District well inventory conducted July 2023.

(5) Additional irrigation demand was not calculated in the draft Regional Water Supply Plan for the Central Florida Water Initiative (July 2023).

(6) Total Withdrawals exclude Lake and Polk amounts