

Appendix A

Population and Water Demand Projections

Introduction

This Appendix contains information on the methodology and data developed for use in the development of the water demand estimates and projections for the 2024 Western Water Supply Plan (WWSP) for six water use categories, as well as future reclaimed water supply and estimates of potential conservation. It also describes the methodologies used to determine the spatial distribution of projected groundwater withdrawals used in the groundwater flow model scenarios. The methods described below are identical to the methods used for the 2023 North Florida Regional Water Supply Plan (NFRWSP).

The North Florida Southeast-Georgia (NFSEG) groundwater flow model extends beyond the WWSP region into the St. Johns, Northwest, and Southwest Florida Water Management Districts (SJRWMD/NFWFMD/SWFWMD), Georgia, and South Carolina. This Appendix also includes sources and information pertaining to the water use data and demand projections within the NFSEG model boundary outside of the WWSP region.

Background and Water Use Categories

The planning horizon for the 2024 WWSP is 2020 to 2045. Population and water demand estimates and projections are a cornerstone for assessing the water needs and availability in regional water supply planning. The Suwannee River Water Management District (District) develops water demand projections to evaluate “existing legal uses, anticipated future needs, and existing and reasonably anticipated sources of water and conservation efforts,” as set forth in subparagraph 373.036(2)(b)4a, Florida Statutes (F.S.). The goals of the District are to project water demands that are reasonable and based on the best information available at the time the projections were developed.

The baseline year, 2015 for the WWSP, is the year that acts as the starting point for water demand projections and is based on the best available data of reported and estimated water use. Water use in the baseline year is not a projection, but rather actual or estimated use. The District has specific requirements for monitoring and reporting of permitted withdrawals. These requirements apply to wells with a primary casing inside diameter of eight inches or greater, as well as surface water pumps with a cumulative intake diameter of six inches or greater.

Five-Year Interval Intermediate Water Use Projections as required by subparagraph 62-40.531(1)(a), Florida Administrative Code (F.A.C.), must include water demand projections for five-year intervals during the planning period. The interval years should end on 5 or 0 (e.g., 2020, 2025, 2030, etc.) as directed by the state formats and guidelines for regional water supply planning (DEP 2019).

Water demands for this 2024 WWSP are estimated in 5-year increments (subsection 62-40.531(1)(a), F.A.C.) for the following six water use categories established by the Florida Department of Environmental Protection (DEP) and the state’s five water management districts:

1. **Public Supply (PS)** - This category includes water provided by any municipality, county, regional water supply authority, special district, public or privately-owned water utility, or multijurisdictional water supply authority for human consumption and other purposes with average annual permitted quantities of 0.1 million gallons per day (mgd) or greater.
2. **Domestic Self-supply and Small Public Supply Systems (DSS)** - The DSS category consists of residential dwellings that are self-supplied water from a dedicated, on-site well and are not connected to a central utility. The DSS category also includes centralized Small Public Supply Systems (SPSS) that provide water for human consumption with average annual permitted quantities of less than 0.1 mgd.
3. **Agricultural (AG)** - The AG category consists of water use associated with the irrigation of crops and other miscellaneous water uses associated with agricultural production (e.g., aquaculture, livestock).
4. **Landscape/Recreational (LR)** - The LR category consists of self-supplied water use associated with the irrigation, maintenance, and operation of golf courses, cemeteries, parks, medians, attractions, common areas in residential areas, and other large green areas. This category also includes water use associated with ornamental or decorative purposes, such as fountains and waterfalls.
5. **Commercial/Industrial/Institutional (CII) and Mining/Dewatering (MD)** - The CII category consists of self-supplied water use associated with the production of goods or provisions of services by CII establishments (e.g., general businesses, office complexes, commercial cooling and heating, bottled water, food and beverage processing, restaurants, gas stations, hotels, car washes, churches, hospitals, and prisons). The MD category consists of water use associated with mining (extraction and processing of subsurface materials and minerals) and long-term dewatering (removal of water to control surface or groundwater levels during construction or excavation activities).
6. **Power Generation (PG)** - The PG category consists of self-supplied water use associated with power plant and power generation facilities, including but not limited to water for steam generation, cooling, and replenishment of cooling reservoirs.

Other than the PS category, all other water use categories obtain water from dedicated, on-site wells and pumps and are not connected to a central utility. In addition to the six water use categories listed above, projections are developed for future reclaimed water flows that could potentially be used to partially offset water demand. Reclaimed water is treated domestic wastewater that has received at least secondary treatment and basic disinfection and is reused for a beneficial purpose. Water demands, reclaimed water flows, and estimates of potential conservation are expressed in average mgd unless otherwise noted.

Data for the baseline year consists of reported and estimated water usage for 2015, whereas data for the years 2020 through 2045 are projected water demands. Water use estimates and demand projections for the six water use categories were calculated for the years 2015, 2020, 2025, 2030, 2035, 2040, and 2045 based on average rainfall conditions, in addition to a 1-in-10 year drought event for 2045. The 1-in-10 year drought event is defined as a year in which rainfall occurs at below normal levels whose frequency has a 10% probability of occurring in any given year. These below normal rainfall conditions result in an increase in water demands for four of the six water use categories. Future reclaimed water flows and estimates of potential conservation were also calculated for the year 2045.

Methodology

Data and Information Sources

The methodology to develop population and water demand estimates and projections uses many data sources such as:

1. Finished water supplied by PS and SPSS collected by DEP through Monthly Operating Reports (MORs).
2. Water use estimates reported by permittees to the District through the Consumptive Use Permit (CUP) program.
3. The District published annual water use reports (SRWMD 2019, 2020a, 2020b, 2020c).
4. Agricultural water use estimates from the Florida Department of Agriculture and Consumer Services (FDACS) (FDACS 2017, 2020).
5. Permitted quantities and percentages of water use as reported in CUPs.
6. University of Florida's Bureau of Economic and Business Research (BEBR) publications (BEBR 2015-2016, 2017a, 2017b, 2018).
7. DEP Annual Reuse Inventory Report (DEP 2019a).
8. Power Plant 10-Year Site Plans collected by the Public Service Commission (PSC).

PS and DSS Population Estimates and Projections

In developing RWSPs, the District must consider BEBR medium population projections pursuant to section 373.709(2)(a)1a, F.S. The population projections developed by BEBR are commonly used in planning efforts throughout Florida. These projections are made at the county-level only (Rayer, S. and Y. Wang. 2020) and require distribution among PS (and SPSS) service area boundaries (PSABs) and parcels and DSS parcels.

The District used BEBR county-level population estimates for 2014-2018. These estimates were distributed within the county based on data provided by PS and SPSS utilities, correctional institutions, and parcel level data (SRWMD, 2021). The District applied the population model created by the SJRWMD that distributes BEBR county-level estimates and projections to the individual parcel level (SJRWMD 2021). This population model also estimated the projected future served populations within PSABs. After meeting with utilities, estimates and projections were revised to include any feedback that was received.

The DSS population for 2014-2018 and projected years (2020-2045) was estimated by taking the total BEBR county-wide population estimate and subtracting institutional population, PS residential served population, and the SPSS residential served population (SRWMD, 2021). The DSS and small public supply population by county is shown in Table A-6.

PS Water Demand

Gross Per Capita Water Use

For PS and SPSS, the gross per capita water use is defined as the total raw water withdrawn (including residential and non-residential uses) for each individual permittee or system divided by its respective service area residential population expressed in average gallons per capita per day (gpcd).

A PS/SPSS specific gross gpcd was applied to each respective PS/SPSS service area projected residential population to calculate future average-year water demands. The source of the data varied (metered/surveyed data or raw water withdrawals and MOR data or finished water withdrawals), however most of the treatment methods currently used in the WWSP region have minimal treatment losses and any differences are assumed to be negligible. Water demand projections were based on the most recent five-year (2014-2018) average gross per capita rate (at the time the projections were developed), which accounts for annual variations in water use with respect to rainfall and recent implementation of conservation programs. In cases where water use data were not available from the sources identified, the District estimated values from historical data and trends.

For this WWSP, it is assumed that current levels of water conservation and use of reclaimed water will continue through the year 2045 planning horizon; additional conservation and the use of additional reclaimed water will be effective in reducing future water demands.

Estimated and projected water demand for each individual PS is shown in Table A-5a (and by county in Table A-5) and includes five-year increments from 2015 to 2045. A water demand projection for 2045 during a 1-in-10 year drought is also shown. Water demand for SPSS (individually listed in Table A-6a) was aggregated for each county and was added to the respective county demand for the DSS category (shown in Table A-6).

To calculate the 1-in-10 year water demand projections, the average year water demands were multiplied by 1.06 (corresponding to a six percent increase). The 1-in-10 year Drought Subcommittee of the Water Planning Coordination Group (WPCG) concluded that a 6% increase in water demand would occur in such an event for the PS water use category (WDPS 1998).

Spatial Groundwater Distribution

For groundwater modeling purposes, the projected groundwater demand and associated location of withdrawal needed to be determined. The projected groundwater demand, specific to each PS and SPSS, was distributed evenly to their respective active or proposed wells/stations contained in their CUP. For those PS systems with multiple wellfields and/or specific wellfield allocations, the associated water demand was divided proportionally amongst the respective wellfields and then further to the wellfields' respective wells/stations.

DSS Water Demand

As stated above, water demand and population projections for SPSS are calculated individually but are combined with the DSS category for reporting purposes at the county level.

Residential Per Capita Water Use

For DSS, the residential per capita water use (also referred to as household) is defined as the water use for solely residential (indoor and outdoor) purposes. The residential gpcd was estimated from the county level residential population served and residential water use. To achieve this, the total water use for each year (2014-2018) for each PS and SPSS was reduced to reflect only the indoor and outdoor residential portion of the total PS and SPSS water use. This was calculated using data reported directly from PS and SPSS systems, as well as the percent of residential water use identified in a CUP. The resulting residential water use values for each PS and SPSS system were summed to the county level and divided by the total PS service area population (at county level) to obtain the county-level average 2014-2018 residential gpcd. The average 2014-2018 county level residential gpcd was then multiplied by the projected 2020, 2025, 2030, 2035, 2040, and 2045 DSS population (by county).

The DSS estimated and projected water demand by county (after adding the total water demand for SPSS) is shown in Table A-6 and includes five-year increments from 2015 to 2045. A water demand projection for 2045 during a 1-in-10 year drought is also included. Identical to PS, to calculate the 1-in-10 year water demand projections for DSS, the average year water demands were multiplied by 1.06.

Spatial Groundwater Distribution

Each SPSS future groundwater demand and location of withdrawal was spatially distributed as defined in the PS section.

Outside of PS and SPSS service areas, parcels with residential housing units were identified using FDOR data; for these parcels a point was added to the centroid of each identified parcel to represent a well/station. Within PS and SPSS service areas, where available, account level billing data and well completion reports were used to determine DSS within those respective PSABs. For these parcels a point was added to the centroid of each identified parcel to represent a well/station. The DSS water demand for each five-year increment was then distributed evenly among the identified DSS parcels, for each county respectively. For counties located in more than one water management district (e.g., Alachua County), the projected DSS water demand specific to each of the Districts was only applied to the DSS parcels identified within the respective Districts' portion of the county.

Agricultural Water Demand

Section 570.93, F.S., directs the FDACS to develop annual statewide agricultural acreage and water demand projections based on the same 20-year planning horizon used in water supply planning. Pursuant to section 373.709(2)(a), F.S., the districts are required to consider AG water demand projections produced by FDACS and that any adjustment or deviation from data provided by FDACS must be fully described, and the original data must be presented along with the adjusted data. FDACS publishes 20-year AG acreage and associated water demand projections in the annual Florida Statewide Agricultural Irrigation Demand (FSAID) reports, through a contract with The Balmoral Group. The fourth annual report (referred to as FSAID IV), which was published in June 2017 (FDACS 2017), was used for 2015 AG acreage estimates. The seventh annual report (referred to as FSAID VII), which was published in June 2020 (FDACS 2020), contains estimated and projected agricultural acreage and water demand projections for the State of Florida for five-year increments from 2020 to 2045, as well as a water demand projection for 2045 during a 1-in-10 year drought. Detailed methodology can be found in the FSAID VII Report.

Acreage

As noted above, the 2015 acreage estimates and 2020-2045 acreage projections were taken directly from FSAID IV and FSAID VII, respectively. The estimated and projected irrigated agricultural acreage by county is shown in Table A-7 in five-year increments from 2015 to 2045. Acreage by crop type is included in Table A-7a.

Demand

As stated above, water use estimates and water demand projections were taken directly from FSAID IV and FSAID VII, respectively. The estimated and projected agricultural water demand by county is shown in Table A-7 in five-year increments from 2015 to 2045. Water demand for 2045 during a 1-in-10 year drought is also included. Water demand by crop type and miscellaneous type uses are included in Tables A-7a and A-7b.

Spatial Groundwater Distribution

The FSAID IV and FSAID VII (FDACS 2017, 2020) deliverable contains the location, in polygon format, of all estimated future agricultural water demand in the five-year increments necessary for groundwater modeling. The SJRWMD used the FSAID IV and FSAID VII (FDACS 2017, 2020) deliverables and refined the data to account for those agricultural areas using surface water and converted the delivered polygon layer to a point layer (tied to CUP station location) for use in groundwater modeling. Detailed methodology regarding the conversion of polygon water demands to point water demands and the conversion of total water demands to reflect groundwater and surface water demands is available from SJRWMD (SJRWMD 2018a).

Landscape/Recreational Water Demand

Water demand for the LR category was projected at the county level using a respective historic LR average gpcd. The county specific LR average gpcd was calculated from LR average water use for 2014-2018 and BEBR estimates of county population for 2014-2018 (BEBR 2015-2016, 2017a, 2017b, 2018).

The average LR gpcd was applied to the additional population projected by BEBR (Rayer, S. and Y. Wang. 2020) for each five-year increment and the associated water demand was added to the 2015 baseline year water use.

The estimated and projected LR water demand by county is shown in Table A-8 in five-year increments from 2015 to 2045. Water demand for 2045 during a 1-in-10 year drought is also included.

The 1-in-10 year Drought Subcommittee of the WPCG, as stated in their final report, determined that values using agricultural (irrigation) models, historic data, and net irrigation ratios are acceptable when calculating the 1-in-10 year water demand projection. A factor was developed for each county, using the highest year water use from 2014-2018 and the percent increase from the 2014-2018 LR water use. For example, if water use in 2016 was X percent higher than the 2014-2018 five-year average, X percent was applied to the average 2045 water demand to project a 2045 1-in-10 year water demand.

Spatial Groundwater Distribution

The projected water demand for the LR category is only estimated at the county level. For groundwater modeling purposes, the groundwater demand and associated location of withdrawal needed to be determined. Several LR CUPs have surface water withdrawals; future groundwater demand for the respective future years at the county level was calculated using the 2015 percent split between groundwater and surface water (via reported CUP data and the SJRWMD's published report (SJRWMD 2016)). The county level groundwater demand for future year scenarios was then distributed to the CUP level using a percent share method of permitted allocation. For example, if an LR CUP's groundwater allocation represented 10% of the county's total groundwater

allocation in 2015, then the LR CUP allocation also maintained 10% of the county groundwater allocation in 2045. The estimated projected groundwater demand specific to each LR CUP was then distributed evenly to their respective active or proposed stations. For counties located in more than one district (e.g., Jefferson County), the projected LR water demand specific to each district was only applied to the respective LR CUPs and stations identified within the respective districts' portion of the county. While future land use and potential new locations of LR polygons was not taken into consideration, the method applied is generally accepted as a valid method for regional planning purposes.

Commercial/Industrial/Institutional and Mining/Dewatering Water Demand

Water demands for the CII/MD category were projected at the county level using a respective historic CII/MD average gpcd. The county specific CII/MD average gpcd was calculated from CII/MD average water use for 2014-2018. CII/MD historic water use and water demand consists of only consumptive uses; recycled surface water and non-consumptive uses were removed. For this WWSP, surface water use by mining operations represents 5% of total surface water use, to account for the loss of water in mining products and evaporation. The remaining surface water was assumed to be recirculated in the mining process and, therefore, is considered non consumptive. For clarification, consumptive use for planning purposes is defined by the districts as any use of water that reduces the supply from which it is withdrawn or diverted.

The CII/MD average gpcd was applied to the additional population projected by BEBR (Rayer, S. and Y. Wang. 2020) for each five-year increment and the associated water demand added to the 2015 baseline year water use. One county in the WWSP has a large CII user (e.g., paper and pulp mills) that is not impacted by population increases (Taylor County). The water use associated with this permit was removed from the average per capita calculations for future CII/MD water demands.

The estimated and projected CII/MD water demand by county is shown in Table A-9 in five-year increments from 2015 to 2045.

The 1-in-10 year Drought Subcommittee of the WPCG, as stated in their final report, determined that drought events do not have significant effects on water use in the CII/MD category. Water use for the CII category is related primarily to processing and production needs and therefore, the average water demands and 1-in-10 water demands are assumed to be equal. Water use for the MD category is also not expected to increase during drought conditions.

Spatial Groundwater Distribution

See the LR spatial groundwater distribution explanation above. The methodology for spatial distribution of future groundwater for the CII/MD category for modeling purposes is the same, using the projected CII/MD future groundwater demands.

Power Generation Water Demand

There is no PG water use in the WWSP region, therefore water use was not estimated or projected for this category.

Review of Population and Water Demand Projections

Water provider specific water use estimates and water demand projections were distributed to each water provider for review and comment. Changes and comments have been incorporated where appropriate. Because this is a long-term planning effort, methodology changes based on short-term trends were not incorporated. However, additional refinements in the future may be considered as population and water use is continually monitored. Comments and suggested changes may be taken into consideration if they are justifiable, defensible, based on historical regression data and long-term trends, and supported by complete documentation.

Summary of Population and Water Demand Projections

The methodologies for calculating population and water demand projections for the six water use categories, as well as future reclaimed water flows and conservation potential (described below) are consistent with the specific plans of major water users at the time projections were made. The projections in this WWSP assume that the current levels of water conservation efforts and the use of reclaimed water will continue through the year 2045 planning horizon. If water conservation efforts and the use of reclaimed water within the WWSP region are implemented at rates higher than historic rates, then 2045 actual water use will be less than projected under average climatic conditions.

2045 Reclaimed Water Projections

Projections of future reclaimed water flows were made for domestic wastewater treatment facilities (WWTF) with 2018 permitted wastewater treatment capacities equal to or greater than 0.1 mgd (DEP 2019a).

Existing Flows

The 2018 flows were separated by total WWTF flow and beneficial reuse (Figure A-1 and Table A-1). For this WWSP, beneficial reuse was considered to be only those uses in which reclaimed water takes the place of an existing or potential use of higher quality water for which reclaimed water is suitable, such as water used for landscape irrigation. Generally, delivery of reclaimed water to sprayfields, absorption fields, and rapid infiltration basins (RIBs) are not considered beneficial reuse, unless located in recharge areas. The majority of WWTF in the WWSP region are located in recharge areas.

The DEP regards several applications of reclaimed water as reuse that the District does not. Therefore, it is common for the District's beneficial reuse quantities to be lower than that of DEP. The District requires the application to achieve a water resource benefit in order to qualify as reuse. Reuse must take the place of an existing or potential use of

higher-quality water or be used to grow useful crops, restore, or maintain adopted minimum flows and/or levels of a river, lake, or wetland, or effectively recharge a useable aquifer. An application that does not meet any of these criteria is considered by the District to be disposal. Reclaimed water applications considered to be reuse by DEP, but disposal by the District are underground injection, absorption fields and RIBs located in discharge areas, surface water augmentation where not required, sprayfields, and artificial wetlands. Reclaimed water applications for underground injection, absorption fields and RIBs will be considered beneficial if they are located in recharge areas, as identified via studies or through consumptive use permitting.

The DEP has a statewide reuse utilization goal of 75% (DEP 2003). Typically for planning purposes, the amount of WWTF flow in the baseline year not being utilized beneficially is multiplied by 75% and this amount is considered as potential existing additional reclaimed water that could be used for beneficial reuse. When determining how much WWTF flow can be utilized, it is recognized that each WWTF is unique and items such as system upgrades and treatment, additional storage, expansion of system, customer availability, and other factors have to be taken into consideration. Although 2015 is recognized as the base year, the District evaluated existing beneficial flows as of 2018 (DEP 2019a) because this was the most recent year of data that was within the scope of the plan.

Table A-1. Facilities in the WWSP with reuse and disposal flows

Facility Name	Map ID	Total Treated Flow (mgd)	Beneficial Use Flow (mgd)	Disposal Flow (mgd)
Cedar Key WRF	1	0.092	0.092	0
Chiefland, City of WWTF	2	0.239	0.239	0
City Of Perry WWTF	3	0.937	0.937	0
Cross City, Town of WWTF	4	0.28	0.516	-0.236
Greenville WWTF	5	0.094	0.094	0
Jefferson Correctional Institution WWTF	6	0.15	0.155	-0.005
Madison, City of WWTF	7	0.721	0.721	0
Mayo Correctional Institution WWTF	8	0.119	0.119	0
Mayo, Town of WWTF	9	0.078	0.078	0
Taylor Correctional Institution WWTF	10	0.164	0.164	0

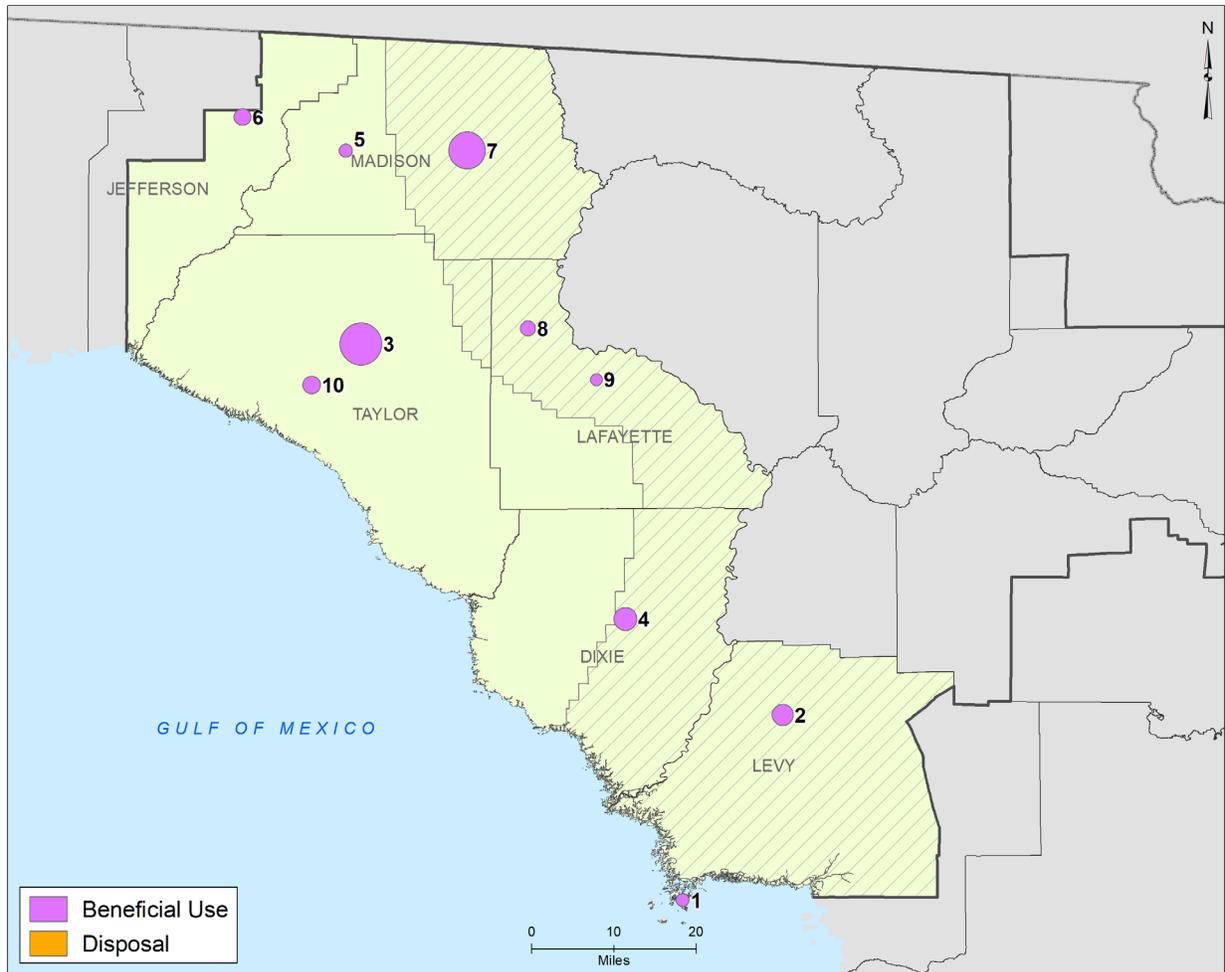


Figure A-1. Summary of 2018 WWTF reclaimed water and disposal flows in the WWSP region

Future Flows

Using PSABs and CUPs, the District identified areas that have the potential to be connected to central sewer systems as a result of population growth. The 2018-2045 increase in population associated for each WWTF service area identified was obtained using the parcel-level projections, as described above. It was assumed that 95% of the identified population increase will receive sewer service and thereby return wastewater for treatment to a WWTF. It is acknowledged that the percentage of population growth and resulting wastewater flows will vary for individual service providers due to a number of factors.

According to empirical sources, increased population will generate approximately 73 gpcd of wastewater flows to the local WWTF. The 73 gpcd represents an average of 58.6 gpcd of wastewater generated by residential customers (indoor use; AWWA, 2016, Vickers 2001, Mayer, P and W. DeOreo, 1999), and 15 gpcd of wastewater return flows for employees at a commercial/industrial facility according to Chapter 64E-6, F.A.C., “Standards for Onsite Sewage Treatment and Disposal Systems”, Rule 64E-6.008

System Size Determinations, Section (1)(B) Table I (effective date 6/25/2009) - System Design.

For the purposes of the WWSP, the District also created a future reclaimed water scenario using the 2018 percent beneficial reuse utilization for existing and future flows, which assumes that no changes to current treatment processes are made (e.g., WWTF upgrade).

Reclaimed water systems are unique to each utility and the potential WWTF flow estimated for this WWSP may not necessarily represent the amount of reclaimed water that could be used in projects. Current treatment processes, WWTF capacities, storage and infrastructure, and inflow and infiltration reduction programs should be considered and could potentially impact the utilization cost of additional or currently available reclaimed water. Likewise, future and existing reclaimed water utilization may be higher than the scenarios presented if the WWTF provided reclaimed water for reuse to more efficient customers. In addition, potential future wastewater flows could be less if additional residential indoor water conservation is achieved. For example, AWWA has identified on their website (www.Drinktap.org) that if residences installed, for every instance, more efficient water fixtures and regularly checked for leaks, daily indoor water use (and associated wastewater flow) could potentially be reduced to 45.2 gpcd (Vickers 2001).

Detailed flows and projections for 2018 and 2045 for each identified WWTF and county are included in Tables A-13 to A-15.

Spatial Distribution

The District did not attempt to identify where future reclaimed water flows or beneficial reuse will occur.

2045 Estimated Water Conservation Potential

Current water conservation potential for the 2024 WWSP region was calculated in order to gauge the future benefit of effective water conservation. For the 2024 WWSP, all categories of water use, except agriculture, utilized the results in the 2020 Central Florida Water Initiative (CFWI) Regional Water Supply Plan (RWSP) as the basis for estimating water conservation potential (CFWI 2020). Table 1 is excerpted from page 50 of the 2020 CFWI RWSP which was developed in partnership with stakeholders and is based on an in-depth assessment of the conservation potential from implementing best management practices. More detailed information on how water conservation estimates were developed in the CFWI can be found at <https://cfwiwater.com/waterconservation.html> and in the 2020 CFWI RWSP (CFWI 2020).

Table 1. CFWI projected 2040 water demand and water conservation savings

Category	Projected 2040 Water Demand (mgd)	Projected 2040 Water Conservation Savings (mgd)
Public Supply	592.28	41.50 – 44.16
Domestic and Small Public Supply	24.59	0.86
Agriculture	163.49	4.19
Landscape/Recreational	46.96	2.22
Commercial/Industrial/Institutional	69.00	1.55 – 4.40
Power Generation	11.27	1.55 – 4.40
Total	907.59	50.32 – 55.83

mgd = million gallons per day

For agriculture, water conservation savings were estimated from the FDACS – FSAID VII Final Report (FDACS 2020). Additionally, a second scenario of water conservation potential based on per capita rates was estimated for the public supply and domestic self-supply (DSS) water use categories.

For the first water conservation scenario, the District used the low-end estimates from the 2020 CFWI RWSP plus the FSAID VII estimates. For the 2024 WWSP, the resulting percentage savings derived from the 2020 CFWI RWSP in Table 1 will be applied to all of the water use categories (except agriculture). See Table 2 for the estimated percentage savings.

Table 2. Percentage Savings Calculated from the 2020 CFWI RWSP

Category	Estimated Percent Savings
Public Supply	7.0
Domestic Self Supply and Small Public Supply	3.5
Agriculture*	N/A*
Landscape/Recreational	4.7
Commercial Industrial/Institutional	2.2
Power Generation	13.8

*For agriculture, FSAID VII will be used to estimate water conservation potential.

The second water conservation scenario involved the public supply and DSS water use categories. For these two water use categories, the District calculated the average 2014-2018 gross per capita rates for only the WWSP region. If a public supply utility's gross per capita was greater than the average 2014-2018 gross per capita, it was revised to reflect the demand based on the WWSP region's average 2014-2018 gross per capita multiplied by the public supply utility's 2045 population projections. This revised demand represents the water conservation potential for the public supply utility based on meeting the lower gross per capita average. For DSS, the corresponding percent reduction in the total public supply water demand by county using the per capita rate average was then applied to DSS 2045 water demand, resulting in the second scenario of DSS water conservation.

NFWWMD and SWFMWD Water Use and Projections

The NFWWMD and SWFMWD provided their water use estimates and projections. These data were incorporated into the 2023 NFRWSP geodatabase. Details concerning the development of the NFWWMD and SWFMWD data and projections should be directed back to the respective water management districts.

Georgia and South Carolina Water Use

Districts obtained water use data and projections through 2050 from the Georgia Environmental Protection Division (GEPD). The data were spatially distributed by staff and provided to GEPD for review. In June 2021, GEPD staff provided comments concerning surface water distribution which were addressed, and the resulting distribution was incorporated into the 2022 NFRWSP geodatabase. Additional information on the Georgia data and projections can be obtained from the GEPD at: [Georgia Water Planning](#). South Carolina data was obtained from the US. Geological Survey at: [ScienceBase Catalog Home](#). Details on how the data were distributed can be found in the *Methodology for the Spatial Distribution of Historic Water Use and Projected Water Demand for Georgia and South Carolina* (SJRWMD 2020).

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Table A-2 (SRWMD - Western Planning Region). Population Estimates for 2015 and Population Projections for 2020-2045, by County, in the Western Planning Region of the Suwannee River Water Management District.

County	District	2015					2020					2025					2030					2035					2040					2045					District Population Change 2015-2045
		BEBR County Population	Institutional Population	District Population	Public Supply Population	Domestic and Small Public Supply Systems Population	BEBR County Population	Institutional Population	District Population	Public Supply Population	Domestic and Small Public Supply Systems Population	BEBR County Population	Institutional Population	District Population	Public Supply Population	Domestic and Small Public Supply Systems Population	BEBR County Population	Institutional Population	District Population	Public Supply Population	Domestic and Small Public Supply Systems Population	BEBR County Population	Institutional Population	District Population	Public Supply Population	Domestic and Small Public Supply Systems Population	BEBR County Population	Institutional Population	District Population	Public Supply Population	Domestic and Small Public Supply Systems Population	BEBR County Population	Institutional Population	District Population	Public Supply Population	Domestic and Small Public Supply Systems Population	
Dixie	SRWMD	16,468	1,536	16,468	2,491	12,441	16,700	1,658	16,700	2,952	12,090	16,900	1,658	16,900	3,077	12,165	17,000	1,658	17,000	3,141	12,201	17,100	1,658	17,100	3,161	12,281	17,100	1,658	17,100	3,161	12,281	17,100	1,658	17,100	3,161	12,281	4%
Jefferson	SRWMD	14,519	1,119	4,676	553	3,004	14,800	1,096	4,717	606	3,015	15,100	1,096	4,797	618	3,083	15,300	1,096	4,849	626	3,127	15,400	1,096	4,876	629	3,151	15,600	1,096	4,929	639	3,194	15,700	1,096	4,955	644	3,215	6%
Lafayette	SRWMD	8,664	1,647	8,664	1,188	5,829	8,700	1,191	8,700	1,208	6,301	9,100	1,191	9,100	1,208	6,701	9,400	1,191	9,400	1,208	7,001	9,700	1,191	9,700	1,208	7,301	9,900	1,191	9,900	1,208	7,501	10,100	1,191	10,100	1,214	7,695	17%
Levy	SRWMD	40,448	0	18,287	5,674	12,613	41,600	0	18,581	5,931	12,650	42,700	0	19,072	6,016	13,056	43,600	0	19,474	6,103	13,371	44,300	0	19,787	6,146	13,641	44,900	0	20,055	6,200	13,855	45,500	0	20,323	6,265	14,058	11%
Madison	SRWMD	19,200	1,585	19,200	5,504	12,111	19,200	1,610	19,422	5,763	12,049	19,500	1,610	19,722	5,832	12,280	19,700	1,610	19,922	5,886	12,426	19,800	1,610	20,022	5,907	12,505	20,000	1,610	20,222	5,958	12,654	20,100	1,610	20,322	6,006	12,705	6%
Taylor	SRWMD	22,824	3,058	22,824	11,191	8,575	22,600	2,222	22,600	11,661	8,717	23,200	2,222	23,200	12,269	8,709	23,600	2,222	23,600	12,696	8,682	24,000	2,222	24,000	13,126	8,652	24,300	2,222	24,300	13,465	8,613	24,700	2,222	24,700	13,831	8,647	8%
SRWMD Western Planning Region Total		122,123	8,945	90,119	26,601	54,573	123,600	7,777	90,720	28,121	54,822	126,500	7,777	92,791	29,020	55,994	128,600	7,777	94,245	29,660	56,808	130,300	7,777	95,485	30,177	57,531	131,800	7,777	96,506	30,631	58,098	133,200	7,777	97,500	31,121	58,602	8%

Notes:

- 1.) Rounding errors account for nominal discrepancies.
- 2.) 2015 county population projections were obtained from BEBR Florida Estimates of Population 2015, Published April 2015.
- 3.) 2020 - 2045 county population projections were obtained from BEBR Population Projections: Volume 53, Bulletin 186, Published January 2020.
- 4.) Population projections shown here are permanent population projections only and do not include any factors such as seasonal residents, tourist population or net commuter population.
- 5.) Public water supply utility service areas often include residences that derive their water supply from privately owned (domestic self-supply) wells. Typically, these domestic self-supply water uses existed prior to their locations becoming part of public water supply service areas. For public water supply service areas, the District does not have sufficient information to separate the population served by public supply systems from those served by domestic self-supply wells. Therefore, public water supply population estimated by the District often include some domestic self-supply population. In certain counties the domestic self-supply population is projected to decrease.

Table A-3 (SRWMD - Western Planning Region). Water Use for 2015 and 5-in-10 Year Total Water Demand Projections for 2020-2045 and 1-in-10 Year Water Demand Projections for 2045, by Category of Use, in the Western Planning Region of the Suwannee River Water

Category	District	Water Use			Demand Projections (5-in-10)															Percent Change 2015-2045	Demand Projections (1-in-10)					
		2015			2020			2025			2030			2035			2040				2045					
		Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total		Ground	Surface	Total	Ground	Surface	Total
Public Supply	SRWMD	4.36	0.00	4.36	4.70	0.00	4.70	4.84	0.00	4.84	4.94	0.00	4.94	4.97	0.00	4.97	5.03	0.00	5.03	5.08	0.00	5.08	17%	5.38	0.00	5.38
Domestic Self-supply and Small Public Supply Systems	SRWMD	4.23	0.00	4.23	4.21	0.00	4.21	4.28	0.00	4.28	4.35	0.00	4.35	4.40	0.00	4.40	4.45	0.00	4.45	4.49	0.00	4.49	6%	4.74	0.00	4.74
Agricultural Irrigation Self-supply	SRWMD	57.97	0.02	57.99	55.98	0.02	56.00	59.87	0.02	59.89	63.40	0.02	63.42	66.88	0.02	66.90	70.75	0.02	70.77	74.25	0.02	74.27	28%	94.09	0.02	94.11
Landscape / Recreational Self-supply	SRWMD	1.15	0.00	1.15	1.15	0.00	1.15	1.18	0.00	1.18	1.19	0.00	1.19	1.20	0.00	1.20	1.20	0.00	1.20	1.21	0.00	1.21	5%	1.34	0.00	1.34
Commercial / Industrial / Institutional Self-supply	SRWMD	41.35	0.17	41.52	41.35	0.17	41.52	41.41	0.17	41.58	41.44	0.17	41.61	41.47	0.17	41.64	41.50	0.17	41.67	41.53	0.17	41.70	0%	41.53	0.17	41.70
Power Generation Self-supply	SRWMD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	0.00	0.00	0.00
SRWMD Western Planning Region Total		109.06	0.19	109.25	107.39	0.19	107.58	111.58	0.19	111.77	115.32	0.19	115.51	118.92	0.19	119.11	122.93	0.19	123.12	126.56	0.19	126.75	16%	147.08	0.19	147.27

Notes:

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.

Table A-4 (SRWMD - Western Planning Region). Total Water Use for 2015 and 5-in-10 Year Water Demand Projections for 2020-2045, and 1-in-10 Year Water Demand Projections for 2045 by County in the Western Planning Region of the Suwannee River

County	District	Water Use			Demand Projections (5-in-10)																Percent Change 2015-2045	Demand Projections (1-in-10)				
		2015			2020			2025			2030			2035			2040			2045			2045			
		Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground		Surface	Total	Ground	Surface	Total
Dixie	SRWMD	8.99	0.00	8.99	7.86	0.00	7.86	8.35	0.00	8.35	8.83	0.00	8.83	9.24	0.00	9.24	9.74	0.00	9.74	10.11	0.00	10.11	12%	12.47	0.00	12.47
Jefferson	SRWMD	3.77	0.02	3.79	3.22	0.02	3.24	3.23	0.02	3.25	3.25	0.02	3.27	3.28	0.02	3.30	3.29	0.02	3.31	3.32	0.02	3.34	-12%	4.00	0.02	4.02
Lafayette	SRWMD	12.85	0.00	12.85	12.55	0.00	12.55	13.64	0.00	13.64	14.61	0.00	14.61	15.56	0.00	15.56	16.62	0.00	16.62	17.58	0.00	17.58	37%	21.89	0.00	21.89
Levy	SRWMD	16.77	0.00	16.77	16.14	0.00	16.14	17.66	0.00	17.66	19.08	0.00	19.08	20.32	0.00	20.32	21.74	0.00	21.74	22.98	0.00	22.98	37%	28.67	0.00	28.67
Madison	SRWMD	24.04	0.00	24.04	24.80	0.00	24.80	25.79	0.00	25.79	26.60	0.00	26.60	27.53	0.00	27.53	28.50	0.00	28.50	29.49	0.00	29.49	23%	36.60	0.00	36.60
Taylor	SRWMD	42.64	0.17	42.81	42.82	0.17	42.99	42.91	0.17	43.08	42.95	0.17	43.12	42.99	0.17	43.16	43.04	0.17	43.21	43.08	0.17	43.25	1%	43.42	0.17	43.59
SRWMD Western Planning Region Total		109.06	0.19	109.25	107.39	0.19	107.58	111.58	0.19	111.77	115.32	0.19	115.51	118.92	0.19	119.11	122.93	0.19	123.12	126.56	0.19	126.75	16%	147.05	0.19	147.24

Notes:

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.

Table A-5 (SRWMD - Western Planning Region). Public Supply Population Served and Water Use for 2015, Public Supply Population and 5-in-10 Year Water Demand Projections for 2020-2045, and 1-in-10 Year Water Demand Projections for 2045 by County in the Western Planning Region of the Suwannee River Water Management District.

County	District	Population Served	Population Projections						Water Use			Demand Projections (5-in-10)															Percent Change 2015-2045	Demand Projections (1-in-10)								
			2015	2020	2025	2030	2035	2040	2045	2015			2020			2025			2030			2035			2040			2045			2045					
										Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface		Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface
Dixie	SRWMD	2,491	2,952	3,077	3,141	3,161	3,161	3,161	0.65	0.00	0.65	0.80	0.00	0.80	0.84	0.00	0.84	0.87	0.00	0.87	0.87	0.00	0.87	0.87	0.00	0.87	0.87	0.00	0.87	0.87	0.00	0.87	34%	0.92	0.00	0.92
Jefferson	SRWMD	553	606	618	626	629	639	644	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Lafayette	SRWMD	1,188	1,208	1,208	1,208	1,208	1,208	1,214	0.15	0.00	0.15	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	7%	0.17	0.00	0.17
Levy	SRWMD	5,674	5,931	6,016	6,103	6,146	6,200	6,265	0.68	0.00	0.68	0.61	0.00	0.61	0.62	0.00	0.62	0.64	0.00	0.64	0.64	0.00	0.64	0.65	0.00	0.65	0.66	0.00	0.66	-3%	0.70	0.00	0.70			
Madison	SRWMD	5,504	5,763	5,832	5,886	5,907	5,958	6,006	1.14	0.00	1.14	1.27	0.00	1.27	1.29	0.00	1.29	1.31	0.00	1.31	1.31	0.00	1.31	1.32	0.00	1.32	1.33	0.00	1.33	17%	1.41	0.00	1.41			
Taylor	SRWMD	11,191	11,661	12,269	12,696	13,126	13,465	13,831	1.74	0.00	1.74	1.86	0.00	1.86	1.93	0.00	1.93	1.96	0.00	1.96	1.99	0.00	1.99	2.03	0.00	2.03	2.06	0.00	2.06	18%	2.18	0.00	2.18			
SRWMD Western Planning Region Total		26,601	28,121	29,020	29,660	30,177	30,631	31,121	4.36	0.00	4.36	4.70	0.00	4.70	4.84	0.00	4.84	4.94	0.00	4.94	4.97	0.00	4.97	5.03	0.00	5.03	5.08	0.00	5.08	17%	5.38	0.00	5.38			

Notes:
 1.) All water use is shown in million gallons per day.
 2.) Rounding errors account for nominal discrepancies.
 3.) 1-in-10 rainfall year demand for 2045 calculated as an additional 6 percent of 2045 average demand.

Table A-6 (SRWMD - Western Planning Region). Public Supply Population Served and Water Use for 2015 and Public Supply Population Projections for 2020-2045, 5-in-10 Year Water Demand Projections for 2020-2045 and 1-in-10 Year Water Demand Projections for 2045 by County and Utility, in the Western Planning Region of the Suwannee River Water Management District.

County	Utility	CUP Number	Population Served	Population Projections						Buildout	Percent Change 2015-2045	Demand Projections (5-in-10)															Percent Change 2015-2045	2014-2018 Avg Gross GPCD	Demand Projections (1-in-10)								
				Water Use								2020			2025			2030			2035			2040					2045								
				2015			2020					2025			2030			2035			2040			2045					2045								
Dixie - SRWMD	Town of Cross City	216823	1,637	2,063	2,188	2,252	2,267	2,267	2,267	5,173	38%	0.53	0.00	0.53	0.68	0.00	0.72	0.75	0.00	0.75	0.75	0.00	0.75	0.75	0.00	0.75	0.75	0.00	0.75	0.75	0.00	0.75	42%	331	0.80	0.00	0.80
	Town of Suwannee	216831	286	300	300	300	302	302	302	476	6%	0.07	0.00	0.07	0.07	0.00	0.07	0.07	0.00	0.07	0.07	0.00	0.07	0.07	0.00	0.07	0.07	0.00	0.07	0.07	0.00	0.07	0%	239	0.07	0.00	0.07
	Town of Horseshoe Beach	217129	164	167	167	167	167	167	167	332	2%	0.05	0.00	0.05	0.05	0.00	0.05	0.05	0.00	0.05	0.05	0.00	0.05	0.05	0.00	0.05	0.05	0.00	0.05	0.05	0.00	0.05	0%	276	0.05	0.00	0.05
	NCRWA Old Town (Also in Gilchrist and Levy)	220310	404	422	422	422	425	425	425	1,744	5%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	0	0.00	0.00	0.00	
	SRWMD Dixie Total		2,491	2,952	3,077	3,141	3,161	3,161	3,161	7,725	27%	0.65	0.00	0.65	0.80	0.00	0.84	0.87	0.00	0.84	0.87	0.00	0.87	0.87	0.00	0.87	0.87	0.00	0.87	0.87	0.00	0.87	34%	N/A	0.92	0.00	0.92
Jefferson - SRWMD	Jefferson Communities Water System Inc.	218662	553	606	618	626	629	639	644	18,403	16%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	N/A	0.00	0.00	0.00
	SRWMD Jefferson Total		553	606	618	626	629	639	644	18,403	16%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	N/A	0.00	0.00	0.00	
Lafayette - SRWMD	Town of Mayo	216851	1,188	1,208	1,208	1,208	1,208	1,208	1,214	1,780	2%	0.15	0.00	0.15	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	7%	133	0.17	0.00	0.17
	SRWMD Lafayette Total		1,188	1,208	1,208	1,208	1,208	1,208	1,214	1,780	2%	0.15	0.00	0.15	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	7%	N/A	0.17	0.00	0.17									
Levy - SRWMD	Cedar Key SP Water & Sewer District	216821	2,180	2,304	2,304	2,304	2,304	2,304	2,304	4,616	6%	0.12	0.00	0.12	0.13	0.00	0.13	0.13	0.00	0.13	0.13	0.00	0.13	0.13	0.00	0.13	0.13	0.00	0.13	0.13	0.00	0.13	8%	58	0.14	0.00	0.14
	City of Chiefland	216826	2,211	2,317	2,402	2,489	2,532	2,586	2,651	9,063	20%	0.31	0.00	0.31	0.31	0.00	0.31	0.32	0.00	0.32	0.34	0.00	0.34	0.34	0.00	0.34	0.35	0.00	0.35	0.36	0.00	0.36	16%	135	0.38	0.00	0.38
	Town of Bronson	216830	1,106	1,133	1,133	1,133	1,133	1,133	1,133	5,075	2%	0.15	0.00	0.15	0.15	0.00	0.15	0.15	0.00	0.15	0.15	0.00	0.15	0.15	0.00	0.15	0.15	0.00	0.15	0.15	0.00	0.15	0%	132	0.16	0.00	0.16
	City of Fanning Springs (Also in Dixie and Gilchrist)	220310	177	177	177	177	177	177	177	581	0%	0.10	0.00	0.10	0.02	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.02	-80%	94	0.02	0.00	0.02
	SRWMD Levy Total		5,674	5,931	6,016	6,103	6,146	6,200	6,265	19,335	10%	0.68	0.00	0.68	0.61	0.00	0.61	0.62	0.00	0.62	0.64	0.00	0.64	0.64	0.00	0.64	0.65	0.00	0.65	0.66	0.66	0.66	-3%	N/A	0.70	0.00	0.70
Madison - SRWMD	City of Madison	216506	3,783	3,969	4,034	4,088	4,109	4,152	4,200	16,736	11%	0.93	0.00	0.93	1.04	0.00	1.06	1.08	0.00	1.08	1.08	0.00	1.08	1.09	0.00	1.09	1.10	0.00	1.10	1.10	0.00	1.10	18%	263	1.17	0.00	1.17
	Town of Greenville	217127	770	796	796	796	796	796	796	2,040	3%	0.10	0.00	0.10	0.11	0.00	0.11	0.11	0.00	0.11	0.11	0.00	0.11	0.11	0.00	0.11	0.11	0.00	0.11	0.11	0.00	0.11	10%	142	0.12	0.00	0.12
	Town of Lee	218663	331	338	338	338	338	346	346	1,929	5%	0.06	0.00	0.06	0.07	0.00	0.07	0.07	0.00	0.07	0.07	0.00	0.07	0.07	0.00	0.07	0.07	0.00	0.07	0.07	0.00	0.07	17%	208	0.07	0.00	0.07
	Cherry Lake Utilities Corporation Inc.	219588	620	660	664	664	664	664	664	1,903	7%	0.05	0.00	0.05	0.05	0.00	0.05	0.05	0.00	0.05	0.05	0.00	0.05	0.05	0.00	0.05	0.05	0.00	0.05	0.05	0.00	0.05	0%	81	0.05	0.00	0.05
SRWMD Madison Total		5,504	5,763	5,832	5,886	5,907	5,958	6,006	22,608	26%	1.14	0.00	1.14	1.27	0.00	1.27	1.29	0.00	1.29	1.31	0.00	1.31	1.31	0.00	1.31	1.32	0.00	1.32	1.33	0.00	1.33	17%	N/A	1.41	0.00	1.41	
Taylor - SRWMD	City of Perry	216835	6,736	6,919	6,919	6,919	6,919	6,919	6,919	12,145	3%	1.43	0.00	1.43	1.49	0.00	1.49	1.49	0.00	1.49	1.49	0.00	1.49	1.49	0.00	1.49	1.49	0.00	1.49	1.49	0.00	1.49	4%	215	1.58	0.00	1.58
	Big Bend Water Authority	220484	3,222	3,412	3,952	4,307	4,662	4,923	5,289	6,192	64%	0.26	0.00	0.26	0.32	0.00	0.32	0.38	0.00	0.38	0.41	0.00	0.41	0.44	0.00	0.44	0.47	0.00	0.47	0.50	0.00	0.50	92%	95	0.53	0.00	0.53
	Taylor Coastal	221166	1,233	1,330	1,398	1,470	1,545	1,623	1,623	8,749	32%	0.05	0.00	0.05	0.05	0.00	0.05	0.06	0.00	0.06	0.06	0.00	0.06	0.06	0.00	0.06	0.07	0.00	0.07	0.07	0.00	0.07	40%	41	0.07	0.00	0.07
SRWMD Taylor Total		11,191	11,661	12,269	12,696	13,126	13,465	13,831	27,086	24%	1.74	0.00	1.74	1.86	0.00	1.86	1.93	0.00	1.93	1.96	0.00	1.96	1.99	0.00	1.99	2.03	0.00	2.03	2.06	0.00	2.06	18%	N/A	2.18	0.00	2.18	
SRWMD Western Planning Region Total		26,601	28,121	29,020	29,660	30,177	30,631	31,121	96,937	17%	4.36	0.00	4.36	4.70	0.00	4.70	4.84	0.00	4.84	4.94	0.00	4.94	4.97	0.00	4.97	5.03	0.00	5.03	5.08	0.00	5.08	17%	N/A	5.38	0.00	5.38	

Notes:

- 1.) All water use and demand projections are shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.
- 3.) Projected population for years 2020 - 2045 are based on BEBR Population Projections: Volume 53, Bulletin 186, Published January 2020.
- 4.) Population projections shown here are permanent population projections only and do not include any factors such as seasonal residents, tourist population or net commuter population.
- 5.) Per capita used to calculate demand projections is an average from 2014 - 2018 and is calculated as (Total Water Use / Total Estimated Population). This per capita is commonly referred to as a gross per capita, as it includes all uses within a utility.
- 6.) 1-in-10 rainfall year demand for 2045 calculated as an additional 6 percent of 2045 average demand.
- 7.) SW quantities (allocations) for 2020 - 2045 were obtained from consumptive use permits.
- 8.) Public water supply utility service areas often include residences that derive their water supply from privately owned (domestic self-supply) wells. Typically, these domestic self-supply water uses existed prior to their locations becoming part of public water supply service areas. For public water supply service areas, the District does not have sufficient information to separate the population served by public supply systems from those served by domestic self-supply wells. Therefore, public water supply population estimated by

Table A-6a (SRWMD - Western Planning Region). 2014-2018 Water Use, Population Served, and Five-Year Gross Per Capita Averages for Public Supply Permitted Equal to or Greater than 0.10 mgd, in the Western Planning Region of the Suwannee River Water Management District.

Cup Number	Owner	Utility	Alternate Name / Comments	County	Water Use					Population					2014-2018 Average Gross GPCD	Notes
					2014	2015	2016	2017	2018	2014	2015	2016	2017	2018		
216823	Town of Cross City	Town of Cross City	PWS 2630202	Dixie	0.519	0.525	0.546	0.552	0.578	1,645	1,637	1,617	1,611	1,696	331	
216831	Town of Suwannee	Town of Suwannee	PWS 2151140	Dixie	0.061	0.065	0.073	0.072	0.073	286	286	285	285	300	239	
217129	Town of Horseshoe Beach	Town of Horseshoe Beach	PWS 2150512	Dixie	0.041	0.045	0.047	0.049	0.042	164	164	160	158	167	276	
220310	NCRWA Old Town	NCRWA Old Town		Dixie	0.000	0.000	0.000	0.000	0.000	405	404	401	398	421	0	Wells are outside of Dixie County.
SRWMD Dixie Total					0.621	0.635	0.666	0.673	0.693	2,500	2,491	2,463	2,452	2,584	263	
ed by NWFWM	Jefferson Communities Water System	Jefferson Communities Water System Inc. - L	PWS 1330748	Jefferson	0.000	0.000	0.000	0.000	0.000	548	553	529	577	603	N/A	Wells are in NWFWM
SRWMD Jefferson Total					0.000	0.000	0.000	0.000	0.000	548	553	529	577	603	N/A	
216851	Town of Mayo	Town of Mayo	PWS 2341181	Lafayette	0.168	0.147	0.161	0.147	0.172	1,195	1,188	1,182	1,183	1,208	133	
SRWMD Lafayette Total					0.168	0.147	0.161	0.147	0.172	1,195	1,188	1,182	1,183	1,208	133	
216821	Cedar Key Sp Water & Sewer District	Cedar Key Sp Water & Sewer District	PWS 2380178	Levy	0.132	0.116	0.125	0.129	0.141	2,191	2,180	2,207	2,283	2,304	58	
216826	City of Chiefland	City of Chiefland	PWS 2380189	Levy	0.312	0.314	0.284	0.291	0.293	2,220	2,211	2,215	2,208	2,229	135	
216830	Town of Bronson	Town of Bronson	PWS 2381178	Levy	0.114	0.154	0.151	0.153	0.164	1,111	1,106	1,110	1,130	1,133	132	
220310	City of Fanning Springs	City of Fanning Springs	PWS 2381411	Levy	0.094	0.097	0.117	0.130	0.137	178	177	176	175	176	170	The per capita was re-calculated to include the whole population estimate for the utility, resulting in a GPCD of 170.
SRWMD Levy Total					0.652	0.681	0.677	0.703	0.735	5,700	5,674	5,708	5,796	5,842	120	
216506	City of Madison	City of Madison	PWS 2400205	Madison	1.013	0.925	0.974	1.058	1.043	3,806	3,783	3,762	3,741	3,969	263	
217127	Town of Greenville	Town of Greenville	PWS 2400440	Madison	0.098	0.100	0.116	0.130	0.104	773	770	772	756	796	142	
218663	Town of Lee	Town of Lee	PWS 2401296	Madison	0.069	0.062	0.079	0.059	0.072	331	331	319	319	338	208	
219588	Cherry Lake Utilities Corporation Inc.	Cherry Lake Utilities Corporation Inc.	PWS 2400185	Madison	0.051	0.052	0.055	0.045	0.050	622	620	620	621	659	81	
SRWMD Madison Total					1.231	1.139	1.224	1.292	1.269	5,532	5,504	5,473	5,437	5,762	222	
216835	City of Perry	City of Perry	PWS 2620208	Taylor	1.414	1.431	1.497	1.415	1.498	6,745	6,736	6,663	6,638	6,919	215	
220484	Big Bend Water Authority	Big Bend Water Authority	PWS 2621102	Taylor	0.294	0.262	0.371	0.272	0.322	3,222	3,222	3,174	3,168	3,300	95	
221166	Taylor Coastal	Taylor Coastal	PWS 2624165	Taylor	0.049	0.050	0.050	0.052	0.052	1,233	1,233	1,200	1,214	1,265	41	
SRWMD Taylor Total					1.757	1.743	1.918	1.739	1.872	11,200	11,191	11,037	11,020	11,484	161	
SRWMD Western Planning Region Total					4.429	4.345	4.646	4.554	4.741	26,675	26,601	26,392	26,465	27,483	174	Jefferson Communities Population is not included in the GPCD calculation

Notes:

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.
- 3.) 2014 - 2018 water use data source is NFSEG master geodatabase with metered and estimated public supply water use.
- 4.) 2014 - 2018 population obtained from BEBR estimates of population, DEP MOR and Basic Facility Report Data, parcel data, and public supply data requests.

Table A-7 (SRWMD - Western Planning Region). Domestic Self-supply and Small Public Supply Systems Population and Water Use for 2015 and 5-in-10 Year Water Demand Projections for 2020-2045, and 1-in-10 Year Water Demand Projections for 2045 by County, in the Western Planning Region of the Suwannee River Water Management District.

County	District	Population	Population Projections						Percent Change 2015-2045	Demand Projections (5-in-10)																											Percent Change 2015-2045	Demand Projections (1-in-10)		
			2015	2020	2025	2030	2035	2040		2045	Water Use 2015			2020			2025			2030			2035			2040			2045			2045								
											Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface		Total		
Dixie	SRWMD	12,441	12,090	12,165	12,201	12,281	12,281	12,281	-1%	1.21	0.00	1.21	1.18	0.00	1.18	1.18	0.00	1.18	1.19	0.00	1.19	1.19	0.00	1.19	1.19	0.00	1.19	1.19	0.00	1.19	1.19	0.00	1.19	-2%	1.26	0.00	1.26			
Jefferson	SRWMD	3,004	3,015	3,083	3,127	3,151	3,194	3,215	7%	0.25	0.00	0.25	0.25	0.00	0.25	0.25	0.00	0.25	0.26	0.00	0.26	0.26	0.00	0.26	0.26	0.00	0.26	0.26	0.00	0.26	0.26	0.00	0.26	4%	0.28	0.00	0.28			
Lafayette	SRWMD	5,829	6,301	6,701	7,001	7,301	7,501	7,695	32%	0.55	0.00	0.55	0.60	0.00	0.60	0.64	0.00	0.64	0.67	0.00	0.67	0.70	0.00	0.70	0.72	0.00	0.72	0.74	0.00	0.74	35%	0.78	0.00	0.78						
Levy	SRWMD	12,613	12,650	13,056	13,371	13,641	13,855	14,058	11%	0.92	0.00	0.92	0.88	0.00	0.88	0.90	0.00	0.90	0.92	0.00	0.92	0.94	0.00	0.94	0.96	0.00	0.96	0.98	0.00	0.98	7%	1.03	0.00	1.03						
Madison	SRWMD	12,111	12,049	12,280	12,426	12,505	12,654	12,706	5%	0.71	0.00	0.71	0.70	0.00	0.70	0.71	0.00	0.71	0.72	0.00	0.72	0.72	0.00	0.72	0.73	0.00	0.73	0.73	0.00	0.73	3%	0.77	0.00	0.77						
Taylor	SRWMD	8,575	8,717	8,709	8,682	8,652	8,613	8,647	1%	0.59	0.00	0.59	0.60	0.00	0.60	0.60	0.00	0.60	0.59	0.00	0.59	0.59	0.00	0.59	0.59	0.00	0.59	0.59	0.00	0.59	0%	0.62	0.00	0.62						
SRWMD Western Planning Region Total		54,573	54,822	55,994	56,808	57,531	58,098	58,602	7%	4.23	0.00	4.23	4.21	0.00	4.21	4.28	0.00	4.28	4.35	0.00	4.35	4.40	0.00	4.40	4.45	0.00	4.45	4.49	0.00	4.49	6%	4.74	0.00	4.74						

- Notes:
- 1.) All water use is shown in million gallons per day.
 - 2.) Rounding errors account for nominal discrepancies.
 - 3.) Public water supply utility service areas often include residences that derive their water supply from privately owned (domestic self-supply) wells. Typically, these domestic self-supply water uses existed prior to their locations becoming part of public water supply service areas. For public water supply service areas, the District does not.
 - 4.) 1-in-10 rainfall year demand for 2045 calculated as an additional 6 percent of 2045 average demand.

Table A-7a (SRWMD - Western Planning Region). Domestic Self-Supply Population and Water Use for 2015 and Population Projections for 2020-2045, 5-in-10 Year Water Demand Projections for 2020-2045 and 1-in-10 Year Water Demand Projections for 2045 by County, in the Western Planning Region of the Suwannee River Water Management District.

County	District	Population 2015	Population Projections						Percent Change 2015-2045	Water Use		Demand Projections (5-in-10)															Percent Change 2015-2045	2014-2018 Avg GPCD	Demand Projections (1-in-10)						
			2020	2025	2030	2035	2040	2045		2020			2025			2030			2035			2040			2045				2045						
			GW	SW	Total	GW	SW	Total		GW	SW	Total	GW	SW	Total	GW	SW	Total	GW	SW	Total	GW	SW	Total	GW	SW			Total	GW	SW	Total			
Dixie	SRWMD	12,308	11,957	12,032	12,068	12,148	12,148	12,148	-1%	1.17	0.00	1.17	1.14	0.00	1.14	1.14	0.00	1.14	1.15	0.00	1.15	1.15	0.00	1.15	1.15	0.00	1.15	1.15	0.00	1.15	-2%	95	1.22	0.00	1.22
Jefferson	SRWMD	2,825	2,836	2,901	2,943	2,964	3,005	3,026	7%	0.25	0.00	0.25	0.25	0.00	0.25	0.25	0.00	0.25	0.26	0.00	0.26	0.26	0.00	0.26	0.26	0.00	0.26	0.26	0.00	0.26	4%	87	0.28	0.00	0.28
Lafayette	SRWMD	5,829	6,301	6,701	7,001	7,301	7,501	7,695	32%	0.55	0.00	0.55	0.60	0.00	0.60	0.64	0.00	0.64	0.67	0.00	0.67	0.70	0.00	0.70	0.72	0.00	0.72	0.74	0.00	0.74	35%	96	0.78	0.00	0.78
Levy	SRWMD	10,914	10,938	11,316	11,613	11,782	11,991	12,183	12%	0.67	0.00	0.67	0.68	0.00	0.68	0.70	0.00	0.70	0.72	0.00	0.72	0.73	0.00	0.73	0.74	0.00	0.74	0.76	0.00	0.76	13%	62	0.81	0.00	0.81
Madison	SRWMD	12,063	12,001	12,232	12,378	12,457	12,606	12,658	5%	0.70	0.00	0.70	0.70	0.00	0.70	0.71	0.00	0.71	0.72	0.00	0.72	0.72	0.00	0.72	0.73	0.00	0.73	0.73	0.00	0.73	4%	58	0.77	0.00	0.77
Taylor	SRWMD	8,486	8,621	8,613	8,586	8,556	8,517	8,551	1%	0.58	0.00	0.58	0.59	0.00	0.59	0.59	0.00	0.59	0.58	0.00	0.58	0.58	0.00	0.58	0.58	0.00	0.58	0.58	0.00	0.58	0%	68	0.61	0.00	0.61
SRWMD Western Planning Region Total		52,425	52,654	53,795	54,589	55,208	55,768	56,261	7%	3.92	0.00	3.92	3.96	0.00	3.96	4.03	0.00	4.03	4.10	0.00	4.10	4.14	0.00	4.14	4.18	0.00	4.18	4.22	0.00	4.22	8%	N/A	4.47	0.00	4.47

- Notes:
- 1.) All water use is shown in million gallons per day.
 - 2.) Rounding errors account for nominal discrepancies.
 - 3.) Projected population for years 2020 - 2045 are based on BEBR Population Projections: Volume 53, Bulletin 186, Published January 2020.
 - 4.) Population projections shown here are permanent population projections only and do not include any factors such as seasonal residents, tourist population or net commuter population.
 - 5.) Per capita used to calculate demand projections is an average from 2014 - 2018 and is calculated as (Total County-wide Residential Water Use / Total Estimated Population). This per capita is commonly referred to as a residential per capita, as it only includes the indoor and outdoor residential uses.
 - 6.) 1-in-10 rainfall year demand for 2045 calculated as an additional 6 percent of 2045 average demand.
 - 7.) All demands are expected to come from groundwater, thus surface water projections are zero.
 - 8.) 2015 water use data source is NFSEG master geodatabase with estimated domestic self-supply water use.
 - 9.) 2014 - 2018 residential county per capita rates obtained from SRWMD published water use reports.

Table A-7b (SRWMD - Western Planning Region). Small Public Supply Population Served and Water Use for 2015, Small Public Supply Population Projections 2020-2045, 5-in-10 Year Water Demand Projections for 2020-2045 and 1-in-10 Year Water Demand Projections for 2045 by County and Utility, in the Western Planning Region of the Suwannee River Water Management District.

County	Utility	CUP Number	Population Served	Population Projections						Buildout	Percent Change 2015-2045	Water Use												Percent Change 2015-2045	2014-2018 Avg GPCD	Demand Projections (1-in-10)														
				2015	2020	2025	2030	2035	2040			2045	2015			2020			2025			2030				2035			2040			2045								
													GW	SW	Total	GW	SW	Total	GW	SW	Total	GW	SW			Total	GW	SW	Total	GW	SW	Total	GW	SW	Total					
Dixie - SRWMD	Charles Carr	218620	42	42	42	42	42	42	42	0%	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0%	190	0.01	0.00	0.01	
	Larry T. Cannon	218836	5	5	5	5	5	5	5	0%	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0%	2000	0.01	0.00	0.01	
	Jim & Sophie Deal	218866	56	56	56	56	56	56	56	0%	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0%	143	0.01	0.00	0.01	
	Velma Lovelace	218929	30	30	30	30	30	30	30	50	0%	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0%	233	0.01	0.00	0.01			
	SRWMD Dixie Total		133	133	133	133	133	133	133	153	0%	0.04	0.00	0.04	0.04	0.00	0.04	0.04	0.00	0.04	0.04	0.00	0.04	0%	N/A	0.04	0.00	0.04												
Jefferson - SRWMD	Jefferson Communities Water System Inc. - Lamont System	218662	179	179	182	184	187	189	189	N/A	6%	0.02	0.00	0.02	0.03	0.00	0.03	0.03	0.00	0.03	0.03	0.00	0.03	0.03	0.00	0.03	0.03	0.00	0.03	0.03	0.00	0.03	0.03	0.00	0.03	50%	150	0.03	0.00	0.03
	SRWMD Jefferson Total		179	179	182	184	187	189	189	0	6%	0.02	0.00	0.02	0.03	0.00	0.03	0.03	0.00	0.03	0.03	0.00	0.03	0.03	0.00	0.03	0.03	0.00	0.03	0.03	0.00	0.03	50%	N/A	0.03	0.00	0.03			
Levy - SRWMD	Blevins Properties, Inc.	215920	42	42	42	42	42	42	42	0%	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0%	143	0.01	0.00	0.01	
	Fowlers Bluff Water Association	216642	361	374	398	410	509	510	516	601	43%	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.02	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.02	100%	32	0.02	0.00	0.02
	University Oaks MHP	220497	289	293	293	293	293	293	293	293	1%	0.13	0.00	0.13	0.08	0.00	0.08	0.08	0.00	0.08	0.08	0.00	0.08	0.08	0.00	0.08	0.08	0.00	0.08	0.08	0.00	0.08	-38%	277	0.08	0.00	0.08			
	Manatee Utilities	217177	156	158	162	168	170	174	179	230	15%	0.02	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.02	0.03	0.00	0.03	0.03	0.00	0.03	50%	147	0.03	0.00	0.03			
	Town of Otter Creek	216656	179	173	173	173	173	173	173	1,156	-3%	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0%	56	0.01	0.00	0.01			
	Fmc Hideaway Inc.	219482	372	372	372	372	372	372	372	372	0%	0.02	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.02	0.02	0.00	0.02	0%	62	0.02	0.00	0.02			
	Springside / Property Planning	220881	300	300	300	300	300	300	300	300	0%	0.05	0.00	0.05	0.05	0.00	0.05	0.05	0.00	0.05	0.05	0.00	0.05	0.05	0.00	0.05	0.05	0.00	0.05	0.05	0.00	0.05	0%	150	0.05	0.00	0.05			
SRWMD Levy Total		1,699	1,712	1,740	1,758	1,859	1,864	1,875	2,994	10%	0.25	0.00	0.25	0.20	0.00	0.20	0.20	0.00	0.20	0.20	0.00	0.20	0.21	0.00	0.21	0.22	0.00	0.22	0.22	0.00	0.22	-12%	N/A	0.22	0.00	0.22				
Madison - SRWMD	Jimmie Ragans	215614	30	30	30	30	30	30	30	0%	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	117	0.00	0.00	0.00			
	M. V. Evans Mobile Home Park	217482	18	18	18	18	18	18	18	18	0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	200	0.00	0.00	0.00		
SRWMD Madison Total		48	48	48	48	48	48	48	48	0%	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100%	N/A	0.00	0.00	0.00														
Taylor - SRWMD	ALS Pheonix Water System	221616	41	48	48	48	48	48	48	49	17%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	67	0.00	0.00	0.00				
	Everett's Mobile Home Park	215763	48	48	48	48	48	48	48	48	0%	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0%	146	0.01	0.00	0.01			
SRWMD Taylor Total		89	96	96	96	96	96	96	97	8%	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0%	213	0.01	0.00	0.01				
SRWMD Western Planning Region Total		2,148	2,168	2,199	2,219	2,323	2,330	2,341	3,292	9%	0.33	0.00	0.33	0.28	0.00	0.28	0.28	0.00	0.28	0.28	0.00	0.28	0.29	0.00	0.29	0.30	0.00	0.30	0.30	0.00	0.30	-9%	N/A	0.30	0.00	0.30				

Notes:
 1.) All water use is shown in million gallons per day.
 2.) Rounding errors account for nominal discrepancies.
 3.) Projected population for years 2020 - 2045 are based on BEBR Population Projections: Volume 53, Bulletin 186, Published January 2020.
 4.) Population projections shown here are permanent population projections only and do not include any factors such as seasonal residents, tourist population or net commuter population.
 5.) Per capita used to calculate demand projections is an average from 2014 - 2018 and is calculated as (Total Water Use / Total Estimated Population). This per capita is commonly referred to as a gross per capita, as it includes all uses within a utility.
 6.) 1-in-10 rainfall year demand for 2045 calculated as an additional 6 percent of 2045 average demand.

Table A-7c (SRWMD - Western Planning Region). 2014-2018 Water Use, Population Served, and Five-Year Gross Per Capita Averages for Public Supply Permitted Smaller than 0.10 mgd in the Western Planning Region of the Suwannee River Water Management District.

Cup Number	Owner	Utility	Alternate Name / Comments	County	Water Use 2014	Water Use 2015	Water Use 2016	Water Use 2017	Water Use 2018	Population 2014	Population 2015	Population 2016	Population 2017	Population 2018	2014-2018 Avg GPCD	Notes
218620	Charles Carr	Charles Carr		Dixie	0.008	0.008	0.008	0.008	0.008	42	42	42	42	42	190	
218836	Larry T. Cannon	Larry T. Cannon		Dixie	0.010	0.010	0.010	0.010	0.010	5	5	5	5	5	2,000	
218866	Jim & Sophie Deal	Jim & Sophie Deal		Dixie	0.008	0.008	0.008	0.008	0.008	56	56	56	56	56	143	
218929	Velma Lovelace	Velma Lovelace		Dixie	0.007	0.007	0.007	0.007	0.007	30	30	30	30	30	233	
SRWMD Dixie Total					0.033	0.033	0.033	0.033	0.033	133	133	133	133	133	248	
218662	Jefferson Communities Water System Inc. - Lamont System	Jefferson Communities Water System Inc. - Lamont System	PWS 1330754	Jefferson	0.022	0.020	0.026	0.031	0.035	179	179	179	179	179	150	
SRWMD Jefferson Total					0.022	0.020	0.026	0.031	0.035	179	179	179	179	179	150	
215920	Blevins Properties, Inc.	Blevins Properties, Inc.		Levy	0.006	0.006	0.006	0.006	0.006	42	42	42	42	42	143	
216642	Fowlers Bluff Water Association	Fowlers Bluff Water Association	PWS 2380387	Levy	0.010	0.012	0.012	0.013	0.011	363	361	361	363	366	32	
220497	University Oaks MHP	University Oaks MHP		Levy	0.063	0.130	0.061	0.084	0.064	291	289	288	291	293	277	
217177	Manatee Utilities	Manatee Utilities		Levy	0.022	0.023	0.023	0.023	0.023	157	156	155	155	155	147	
216656	Town of Otter Creek	Town of Otter Creek	PWS 2380854	Levy	0.008	0.010	0.011	0.010	0.010	179	179	174	171	173	56	
219482	Fimc Hideaway Inc.	Fimc Hideaway Inc.		Levy	0.020	0.023	0.026	0.023	0.024	372	372	372	372	372	62	
220881	Springside/Property Planning	Springside/Property Planning		Levy	0.045	0.045	0.045	0.045	0.045	300	300	300	300	300	150	
SRWMD Levy Total					0.174	0.249	0.184	0.204	0.183	1,704	1,699	1,692	1,694	1,701	117	
215614	Jimmie Ragans	Jimmie Ragans		Madison	0.006	0.006	0.006	0.006	0.006	30	30	30	30	30	200	
217482	M. V. Evans Mobile Home Park	M. V. Evans Mobile Home Park		Madison	0.003	0.003	0.003	0.003	0.003	18	18	18	18	18	167	
SRWMD Madison Total					0.009	0.009	0.009	0.009	0.009	48	48	48	48	48	188	
221616	ALS Pheonix Water System	ALS Pheonix Water System		Taylor	0.005	0.002	0.002	0.003	0.003	50	41	41	45	48	67	
215763	Everett's Mobile Home Park	Everett's Mobile Home Park		Taylor	0.007	0.007	0.007	0.007	0.007	48	48	48	48	48	146	
SRWMD Taylor Total					0.012	0.009	0.009	0.010	0.010	98	89	89	93	96	108	
SRWMD Western Planning Region Total					0.250	0.320	0.261	0.287	0.270	2,162	2,148	2,141	2,147	2,157	129	

Notes:

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.
- 3.) 2014 - 2018 water use data source is NFSEG master geodatabase with metered and estimated small public supply water use.
- 4.) 2014 - 2018 population obtained from BEBR estimates of population, DEP MOR and Basic Facility Report Data, parcel data, and public supply data requests.

Table A-8 (SRWMD - Western Planning Region). Agricultural Irrigation Self-supply Water Use, Miscellaneous Agricultural Water Use, and Acreage for 2015, 5-in-10 Year Water Demand Projections for 2020-2045, Acreage Projections for 2020-2045, and 1-in-10 Year Water Demand Projections for 2045 by County, in the Western Planning Region of the Suwannee River Water Management District.

County	District	Water Use			Demand Projections (5-in-10)																		Percent Change 2015-2045	Acreage 2015	Acreage Projections						Percent Change 2015-2045	Demand Projections (1-in-10) 2045			
		2015			2020			2025			2030			2035			2040			2045					2020-2045							2045			
		Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total			2020	2025	2030	2035	2040	2045		2020	2025	2030	2035
Dixie	SRWMD	6.81	0.00	6.81	5.56	0.00	5.56	6.01	0.00	6.01	6.45	0.00	6.45	6.86	0.00	6.86	7.36	0.00	7.36	7.73	0.00	7.73	14%	6,195	7,000	7,356	7,708	8,046	8,370	8,705	41%	9.97	0.00	9.97	
Jefferson	SRWMD	3.27	0.02	3.29	2.72	0.02	2.74	2.73	0.02	2.75	2.74	0.02	2.76	2.77	0.02	2.79	2.78	0.02	2.80	2.81	0.02	2.83	-14%	2,333	2,401	2,401	2,401	2,401	2,401	2,401	3%	3.44	0.02	3.46	
Lafayette	SRWMD	11.76	0.00	11.76	11.40	0.00	11.40	12.43	0.00	12.43	13.36	0.00	13.36	14.27	0.00	14.27	15.30	0.00	15.30	16.23	0.00	16.23	38%	9,324	11,532	12,250	12,963	13,663	14,361	15,060	62%	20.50	0.00	20.50	
Levy	SRWMD	14.80	0.00	14.80	14.28	0.00	14.28	15.76	0.00	15.76	17.14	0.00	17.14	18.36	0.00	18.36	19.75	0.00	19.75	20.96	0.00	20.96	42%	11,154	13,417	14,479	15,576	16,303	17,347	18,067	62%	26.53	0.00	26.53	
Madison	SRWMD	20.87	0.00	20.87	21.50	0.00	21.50	22.43	0.00	22.43	23.20	0.00	23.20	24.12	0.00	24.12	25.06	0.00	25.06	26.03	0.00	26.03	25%	18,912	24,384	24,958	25,535	26,103	26,672	27,241	44%	33.01	0.00	33.01	
Taylor	SRWMD	0.46	0.00	0.46	0.52	0.00	0.52	0.51	0.00	0.51	0.51	0.00	0.51	0.50	0.00	0.50	0.50	0.00	0.50	0.49	0.00	0.49	7%	476	515	515	515	515	515	515	8%	0.64	0.00	0.64	
SRWMD Western Planning Region Total		57.97	0.02	57.99	55.98	0.02	56.00	59.87	0.02	59.89	63.40	0.02	63.42	66.88	0.02	66.90	70.75	0.02	70.77	74.25	0.02	74.27	28%	48,394	59,249	61,959	64,698	67,031	69,666	71,989	49%	94.09	0.02	94.11	

- Notes:
- 1.) All water use is shown in million gallons per day.
 - 2.) Rounding errors account for nominal discrepancies.
 - 3.) 2015 water use data source is NFSEG master geodatabase with metered and estimated agricultural water use.
 - 4.) 2015 acreage source is FSAID IV published June 30, 2017 by The Balmoral Group for the Florida Department of Agriculture and Consumer Services.
 - 5.) 2020 - 2045 acreage projections and 2020 - 2045 average and 1-in-10 water demand projections derived from FSAID VII, published June 30, 2020 from The Balmoral Group for the Florida Department of Agriculture and Consumer Services.
 - 6.) 2020 - 2045 groundwater / surface water split estimated using 2015 ratios.

Table A-8a (SRWMD - Western Planning Region). Agricultural Irrigation Self-supply Water Use (Including Miscellaneous Water Use) and Acreage for 2015, 5-in-10 Year Water Demand Projections and Acreage Projections for 2020-2045, and 1-in-10 Year Water Demand Projections for 2045, by Crop Category by County, in the Western Planning Region of the Suwannee River Water Management District.

County	Crop Category	2015 Estimated Agriculture		2020 Projected Agriculture		2025 Projected Agriculture		2030 Projected Agriculture		2035 Projected Agriculture		2040 Projected Agriculture		2045 Projected Agriculture		Percent Change 2015-2045		2045 (1-in-10) Demand
		Acres	MGD	Acreage	MGD													
Dixie - SRWMD	Citrus	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Fruit (Non-citrus)	0	0.00	0	0.00	0	0.00	28	0.05	64	0.11	64	0.11	117	0.21	N/A	N/A	0.29
	Potatoes	0	0.00	0	0.00	22	0.02	22	0.02	22	0.02	22	0.02	47	0.05	N/A	N/A	0.08
	Vegetables (Fresh Market)	212	0.38	257	0.31	524	0.65	750	0.93	883	1.10	933	1.17	1,032	1.30	387%	242%	1.70
	Field Crops	5,625	5.84	6,338	4.77	6,338	4.80	6,417	4.90	6,586	5.08	6,728	5.25	6,829	5.37	21%	-8%	6.82
	Greenhouse/Nursery	9	0.04	9	0.03	17	0.05	17	0.05	17	0.05	131	0.30	174	0.29	1833%	625%	0.44
	Hay	158	0.23	205	0.19	264	0.23	283	0.24	283	0.24	301	0.25	315	0.25	99%	9%	0.35
	Sod	191	0.20	191	0.16	191	0.16	191	0.16	191	0.16	191	0.16	191	0.16	0%	-20%	0.19
	Sugarcane	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Miscellaneous	0	0.12	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	0	0.10	N/A	-17%	0.10
Total		6,195	6.81	7,000	5.56	7,356	6.01	7,708	6.45	8,046	6.86	8,370	7.36	8,705	7.73	41%	14%	9.97
Jefferson - SRWMD	Citrus	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Fruit (Non-citrus)	124	0.26	124	0.22	124	0.22	124	0.22	124	0.22	124	0.22	124	0.22	0%	-15%	0.32
	Potatoes	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Vegetables (Fresh Market)	35	0.01	9	0.01	9	0.01	9	0.01	9	0.01	9	0.01	9	0.01	-74%	0%	0.02
	Field Crops	1,124	1.56	1,816	1.30	1,816	1.31	1,816	1.32	1,816	1.34	1,816	1.35	1,816	1.37	62%	-12%	1.74
	Greenhouse/Nursery	407	1.13	388	0.94	388	0.94	388	0.94	388	0.95	388	0.95	388	0.96	-5%	-15%	1.09
	Hay	20	0.07	64	0.06	64	0.06	64	0.06	64	0.06	64	0.06	64	0.06	220%	-14%	0.08
	Sod	623	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	-100%	N/A	0.00
	Sugarcane	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Miscellaneous	0	0.25	0	0.21	0	0.21	0	0.21	0	0.21	0	0.21	0	0.21	N/A	-16%	0.21
Total		2,333	3.29	2,401	2.74	2,401	2.75	2,401	2.76	2,401	2.79	2,401	2.80	2,401	2.83	3%	-14%	3.46
Lafayette - SRWMD	Citrus	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Fruit (Non-citrus)	0	0.18	88	0.17	242	0.45	378	0.69	385	0.70	512	0.93	564	1.02	N/A	467%	1.44
	Potatoes	0	0.00	0	0.00	35	0.04	35	0.04	68	0.08	78	0.09	89	0.10	N/A	N/A	0.15
	Vegetables (Fresh Market)	498	0.98	757	0.95	1,045	1.33	1,388	1.77	1,727	2.21	1,911	2.46	2,137	2.75	329%	181%	3.61
	Field Crops	6,862	6.46	8,545	6.26	8,679	6.42	8,852	6.60	9,107	6.90	9,399	7.22	9,631	7.49	40%	16%	9.51
	Greenhouse/Nursery	68	0.27	115	0.26	182	0.40	202	0.45	241	0.53	326	0.72	454	1.00	568%	270%	1.13
	Hay	1,896	2.16	2,027	2.09	2,067	2.12	2,108	2.14	2,135	2.18	2,135	2.21	2,185	2.20	15%	2%	2.99
	Sod	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Sugarcane	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Miscellaneous	0	1.72	0	1.67	0	1.67	0	1.67	0	1.67	0	1.67	0	1.67	N/A	-3%	1.67
Total		9,324	11.76	11,532	11.40	12,250	12.43	12,963	13.36	13,663	14.27	14,361	15.30	15,060	16.23	62%	38%	20.50
Levy - SRWMD	Citrus	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Fruit (Non-citrus)	0	0.18	101	0.17	333	0.59	580	1.03	812	1.44	855	1.52	1,017	1.81	N/A	906%	2.55
	Potatoes	0	0.00	0	0.00	0	0.00	116	0.13	129	0.15	209	0.24	224	0.26	N/A	N/A	0.37
	Vegetables (Fresh Market)	1,452	3.63	2,472	3.50	2,938	4.11	3,257	4.54	3,363	4.70	3,621	5.06	3,884	5.42	167%	49%	7.09
	Field Crops	7,610	7.13	9,017	6.88	9,196	7.06	9,367	7.24	9,562	7.47	9,825	7.74	9,910	7.88	30%	11%	10.00
	Greenhouse/Nursery	844	2.31	880	2.23	954	2.40	973	2.45	1,144	2.83	1,318	3.23	1,495	3.63	77%	57%	4.10
	Hay	1,248	0.84	947	0.81	1,058	0.91	1,283	1.06	1,293	1.08	1,519	1.27	1,537	1.27	23%	51%	1.73
	Sod	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Sugarcane	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Miscellaneous	0	0.72	0	0.69	0	0.69	0	0.69	0	0.69	0	0.69	0	0.69	N/A	-4%	0.69
Total		11,154	14.80	13,417	14.28	14,479	15.76	15,576	17.14	16,303	18.36	17,347	19.75	18,067	20.96	62%	42%	26.53
Madison - SRWMD	Citrus	0	0.02	27	0.02	27	0.03	27	0.03	27	0.03	27	0.03	27	0.03	N/A	50%	0.04
	Fruit (Non-citrus)	7	0.11	60	0.11	221	0.40	331	0.60	421	0.76	543	0.97	681	1.22	9629%	1009%	1.72
	Potatoes	0	0.00	0	0.00	0	0.00	75	0.09	75	0.09	75	0.09	75	0.09	N/A	N/A	0.12
	Vegetables (Fresh Market)	1,617	3.53	3,019	3.64	3,239	3.96	3,381	4.18	3,452	4.31	3,684	4.64	3,794	4.81	135%	36%	6.30
	Field Crops	16,679	13.96	19,361	14.38	19,462	14.55	19,658	14.80	19,859	15.14	20,006	15.41	20,205	15.71	21%	13%	19.95
	Greenhouse/Nursery	342	0.76	370	0.78	431	0.92	431	0.92	515	1.11	583	1.26	705	1.53	106%	101%	1.73
	Hay	267	1.31	1,547	1.35	1,578	1.35	1,632	1.36	1,754	1.46	1,754	1.44	1,754	1.42	557%	8%	1.93
	Sod	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Sugarcane	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Miscellaneous	0	1.18	0	1.22	0	1.22	0	1.22	0	1.22	0	1.22	0	1.22	N/A	3%	1.22
Total		18,912	20.87	24,384	21.50	24,958	22.43	25,535	23.20	26,103	24.12	26,672	25.06	27,241	26.03	44%	25%	33.01

Table A-8a, Continued (SRWMD - Western Planning Region). Agricultural Irrigation Self-supply Water Use (Including Miscellaneous Water Use) and Acreage for 2015, 5-in-10 Year Water Demand Projections and Acreage Projections for 2020-2045, and 1-in-10 Year Water Demand Projections for 2045, by Crop Category by County, in the Western Planning Region of the Suwannee River Water Management District.

Taylor - SRWMD	Citrus	0	0.04	39	0.04	39	0.04	39	0.04	39	0.04	39	0.04	39	0.04	N/A	0%	0.06
	Fruit (Non-citrus)	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Potatoes	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Vegetables (Fresh Market)	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Field Crops	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Greenhouse/Nursery	7	0.01	7	0.01	7	0.01	7	0.01	7	0.01	7	0.01	7	0.01	0%	0%	0.01
	Hay	469	0.34	469	0.38	469	0.37	469	0.37	469	0.36	469	0.36	469	0.35	0%	3%	0.48
	Sod	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Sugarcane	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Miscellaneous	0	0.08	0	0.09	0	0.09	0	0.09	0	0.09	0	0.09	0	0.09	N/A	13%	0.09
Total	476	0.46	515	0.52	515	0.51	515	0.51	515	0.50	515	0.50	515	0.49	8%	7%	0.64	
SRWMD Western Planning Region Total	Citrus	0	0.06	66	0.06	66	0.07	66	0.07	66	0.07	66	0.07	66	0.07	N/A	17%	0.10
	Fruit (Non-citrus)	131	0.73	373	0.67	920	1.66	1,441	2.59	1,806	3.23	2,098	3.75	2,503	4.48	1811%	514%	6.32
	Potatoes	0	0.00	0	0.00	57	0.06	248	0.28	294	0.34	384	0.44	435	0.50	N/A	N/A	0.72
	Vegetables (Fresh Market)	3,814	8.53	6,514	8.41	7,755	10.06	8,785	11.43	9,434	12.33	10,158	13.34	10,856	14.29	185%	68%	18.72
	Field Crops	37,900	34.95	45,077	33.59	45,491	34.14	46,110	34.86	46,930	35.93	47,774	36.97	48,391	37.82	28%	8%	48.02
	Greenhouse/Nursery	1,677	4.52	1,769	4.25	1,979	4.72	2,018	4.82	2,312	5.48	2,753	6.47	3,223	7.42	92%	64%	8.50
	Hay	4,058	4.95	5,259	4.88	5,500	5.04	5,839	5.23	5,998	5.38	6,242	5.59	6,324	5.55	56%	12%	7.56
	Sod	814	0.20	191	0.16	191	0.16	191	0.16	191	0.16	191	0.16	191	0.16	-77%	-20%	0.19
	Sugarcane	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	N/A	N/A	0.00
	Miscellaneous	0	4.07	0	3.98	0	3.98	0	3.98	0	3.98	0	3.98	0	3.98	N/A	-2%	3.98
Total	48,394	57.99	59,249	56.00	61,959	59.89	64,698	63.42	67,031	66.90	69,666	70.77	71,989	74.27	49%	28%	94.11	

Notes:

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.
- 3.) 2015 total water use data source is NFSEG master geodatabase with metered and estimated agricultural water use. The 2015 water use by crop was estimated using 2020 FSAID VII ratios.
- 4.) 2015 acreage source is FSAID IV published June 30, 2017 by The Balmoral Group for the Florida Department of Agriculture and Consumer Services.
- 5.) 2020 - 2045 acreage projections and 2020 - 2045 average and 1-in-10 water demand projections derived from FSAID VII published June 30, 2020 by The Balmoral Group for the Florida Department of Agriculture and Consumer Services.

Table A-8b (SRWMD - Western Planning Region). Miscellaneous Agricultural Self-supply Water Use for 2015, 5-in-10 Year Demand Projections for 2020-2045, and 1-in-10 Year Demand Projections for 2045 by County, in the Western Planning Region of the Suwannee River Water Management District.

County	District	2015 Water Use				2020-2045 Demand Projections				Percent Change 2015-2045
		Dairy	Livestock	Aquaculture	Total	Dairy	Livestock	Aquaculture	Total	
Dixie	SRWMD	0.00	0.06	0.05	0.12	0.00	0.05	0.04	0.10	-17%
Jefferson	SRWMD	0.00	0.18	0.06	0.25	0.00	0.15	0.05	0.21	-16%
Lafayette	SRWMD	1.30	0.42	0.01	1.72	1.26	0.41	0.01	1.67	-3%
Levy	SRWMD	0.00	0.71	0.00	0.72	0.00	0.69	0.00	0.69	-4%
Madison	SRWMD	0.69	0.47	0.02	1.18	0.71	0.49	0.02	1.22	3%
Taylor	SRWMD	0.00	0.07	0.01	0.08	0.00	0.08	0.01	0.09	13%
SRWMD Western Planning Region Total		1.99	1.91	0.15	4.07	1.97	1.87	0.13	3.98	-2%

Notes:

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.
- 3.) 2015 total water use data source is NFSEG master geodatabase with metered and estimated agricultural water use. The 2015 water use by category was estimated using 2020 FSAID VII ratios.
- 4.) 2020 - 2045 projected water demand derived from FSAID VII AG layer, published June 30, 2020 by the Balmoral Group for the Florida Department of Agriculture and Consumer Services.
- 5.) FSAID VII AG layer, published June 30, 2020 by the Balmoral Group for the Florida Department of Agriculture and Consumer Services assumes no increase for 1-in-10 year drought conditions.

Table A-9 (SRWMD - Western Planning Region). Landscape / Recreational Self-supply Water Use for 2015 and 5-in-10 Year Demand Projections for 2020-2045, and 1-in-10 Year Demand Projections for 2045 by County, in the Western Planning Region of the Suwannee River Water Management District.

County	District	Water Use			Demand Projections (5-in-10)																		Percent Change 2015-2045	Demand Projections (1-in-10)		
		2015			2020			2025			2030			2035			2040			2045				2045		
		Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total		Ground	Surface	Total
Dixie	SRWMD	0.12	0.00	0.12	0.12	0.00	0.12	0.12	0.00	0.12	0.12	0.00	0.12	0.12	0.00	0.12	0.12	0.00	0.12	0.12	0.00	0.12	0%	0.12	0.00	0.12
Jefferson	SRWMD	0.09	0.00	0.09	0.09	0.00	0.09	0.09	0.00	0.09	0.09	0.00	0.09	0.09	0.00	0.09	0.09	0.00	0.09	0.09	0.00	0.09	0%	0.12	0.00	0.12
Lafayette	SRWMD	0.06	0.00	0.06	0.06	0.00	0.06	0.06	0.00	0.06	0.06	0.00	0.06	0.06	0.00	0.06	0.06	0.00	0.06	0.06	0.00	0.06	0%	0.06	0.00	0.06
Levy	SRWMD	0.21	0.00	0.21	0.21	0.00	0.21	0.22	0.00	0.22	5%	0.25	0.00	0.25												
Madison	SRWMD	0.32	0.00	0.32	0.32	0.00	0.32	0.33	0.00	0.33	3%	0.35	0.00	0.35												
Taylor	SRWMD	0.35	0.00	0.35	0.35	0.00	0.35	0.36	0.00	0.36	0.37	0.00	0.37	0.38	0.00	0.38	0.38	0.00	0.38	0.39	0.00	0.39	11%	0.44	0.00	0.44
SRWMD Western Planning Region Total		1.15	0.00	1.15	1.15	0.00	1.15	1.18	0.00	1.18	1.19	0.00	1.19	1.20	0.00	1.20	1.20	0.00	1.20	1.21	0.00	1.21	5%	1.34	0.00	1.34

Notes:

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.
- 3.) 2015 water use data source is NFSEG master geodatabase with metered and estimated landscape/recreational water use.
- 4.) 2020 - 2045 projected surface water demand was interpolated based on 2015 percentages.
- 5.) 2045 1-in-10 rainfall year demands estimated using percentage above average from highest water year from 2014 - 2018.

Table A-9a (SRWMD - Western Planning Region). 2014-2018 Water Use, Total County Population, and Five-Year Gross Per Capita Averages for Landscape / Recreational Self-supply and Landscape/Recreational/Aesthetic Self-supply Water Demand Increases, in the Western Planning Region of the Suwannee River Water Management District.

County	District	Total County Water Use					2014-2018 Average	High Year	% Above Average	County Population Within District					2014-2018 Average GPCD	County Population Projections Within District							Increase in County Population Within District					Change in Landscape / Recreational Self-supply Water Demand						
		2014	2015	2016	2017	2018				2014	2015	2016	2017	2018		2015	2020	2025	2030	2035	2040	2045	2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2020	2025	2030	2035	2040	2045
Dixie	SRWMD	0.12	0.12	0.11	0.12	0.12	0.12	0.12	0%	15,066	16,468	15,091	15,076	14,818	8	16,468	16,700	16,900	17,000	17,100	17,100	17,100	232	200	100	100	0	0	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson	SRWMD	0.13	0.09	0.09	0.09	0.09	0.10	0.13	30%	3,574	4,676	3,554	3,552	3,600	26	4,676	4,717	4,797	4,849	4,876	4,929	4,955	41	80	52	27	53	26	0.00	0.00	0.00	0.00	0.00	0.00
Lafayette	SRWMD	0.06	0.06	0.06	0.06	0.04	0.06	0.06	0%	6,972	8,664	7,000	7,085	7,094	8	8,664	8,700	9,100	9,400	9,700	9,900	10,100	36	400	300	300	200	200	0.00	0.00	0.00	0.00	0.00	0.00
Levy	SRWMD	0.23	0.21	0.20	0.19	0.17	0.20	0.23	15%	18,661	18,287	18,697	19,015	18,709	11	18,287	18,581	19,072	19,474	19,787	20,055	20,323	294	491	402	313	268	268	0.00	0.01	0.00	0.00	0.00	0.00
Madison	SRWMD	0.34	0.32	0.31	0.31	0.31	0.32	0.34	6%	17,663	19,200	17,713	17,704	17,812	18	19,200	19,422	19,722	19,922	20,022	20,222	222	300	200	100	200	100	0.00	0.01	0.00	0.00	0.00	0.00	
Taylor	SRWMD	0.28	0.35	0.31	0.30	0.30	0.31	0.35	13%	19,760	22,824	19,698	19,866	20,068	15	22,824	22,600	23,200	23,600	24,000	24,300	24,700	-224	600	400	400	300	400	0.00	0.01	0.01	0.01	0.00	0.01
SRWMD Western Planning Region Total		1.16	1.15	1.08	1.07	1.03	1.10	1.16	5%	81,696	90,119	81,753	82,298	82,101	N/A	90,119	90,720	92,791	94,245	95,485	96,506	97,500	601	2,071	1,454	1,240	1,021	994	0	0.03	0.01	0.01	0.00	0.01

Notes:

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.
- 3.) 2014 - 2018 water use data source is NFSEG master geodatabase with metered and estimated landscape / recreational water use.
- 4.) 2014 - 2018 population obtained from BEBR estimates of population, DEP MOR and Basic Facility Report Data, parcel data, and public supply data requests.
- 5.) Projected population for years 2020 - 2045 are based on BEBR Population Projections: Volume 53, Bulletin 186, Published January 2020.

Table A-10 (SRWMD - Western Planning Region). Commercial / Industrial / Institutional and Mining / Dewatering Self-supply Water Use for 2015 and 5-in-10 Year Demand Projections for 2020-2045, by County, in the Western Planning Region of the Suwannee River Water Management District.

County	District	Water Use			Demand Projections (5-in-10)																		Percent Change 2015-2045
		2015			2020			2025			2030			2035			2040			2045			
		Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	
Dixie	SRWMD	0.20	0.00	0.20	0.20	0.00	0.20	0.20	0.00	0.20	0.20	0.00	0.20	0.20	0.00	0.20	0.20	0.00	0.20	0.20	0.00	0.20	0%
Jefferson	SRWMD	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0%
Lafayette	SRWMD	0.33	0.00	0.33	0.33	0.00	0.33	0.35	0.00	0.35	0.36	0.00	0.36	0.37	0.00	0.37	0.38	0.00	0.38	0.39	0.00	0.39	18%
Levy	SRWMD	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0%
Madison	SRWMD	1.00	0.00	1.00	1.01	0.00	1.01	1.03	0.00	1.03	1.04	0.00	1.04	1.05	0.00	1.05	1.06	0.00	1.06	1.07	0.00	1.07	7%
Taylor	SRWMD	39.50	0.17	39.67	39.49	0.17	39.66	39.51	0.17	39.68	39.52	0.17	39.69	39.53	0.17	39.70	39.54	0.17	39.71	39.55	0.17	39.72	0%
SRWMD Western Planning Region Total		41.35	0.17	41.52	41.35	0.17	41.52	41.41	0.17	41.58	41.44	0.17	41.61	41.47	0.17	41.64	41.50	0.17	41.67	41.53	0.17	41.70	0%

Notes:

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.
- 3.) 2015 water use data source is NFSEG master geodatabase with metered and estimated commercial/industrial/institutional and mining/dewatering water use.
- 4.) 2020 - 2045 projected surface water demand was interpolated based on 2015 percentages.
- 5.) The commercial/industrial/institutional and mining/dewatering water use category is not impacted by drought conditions, therefore the 5-in-10 2045 water demand also serves as the 1-in-10 water demand.

Table A-10a (SRWMD - Western Planning Region). 2014-2018 Water Use, Total County Population, and Five-Year Gross Per Capita Averages for Commercial / Industrial / Institutional and Mining / Dewatering Self-supply Water Demand Increases, in the Western Planning Region of the Suwannee River Water Management District.

County	District	Total County Water Use					County Population Within District					2014-2018 Average GPCD	County Population Projections Within District						Increase in County Population Within District						Change in Commercial / Industrial / Institutional and Mining / Dewatering Self-supply Water Demand						
		2014	2015	2016	2017	2018	2014	2015	2016	2017	2018		2015	2020	2025	2030	2035	2040	2045	2015-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2020	2025	2030	2035	2040	2045
Dixie	SRWMD	0.20	0.20	0.21	0.12	0.12	15,066	16,468	15,091	15,076	14,818	11	16,468	16,700	16,900	17,000	17,100	17,100	232	200	100	100	0	0	0.00	0.00	0.00	0.00	0.00	0.00	
Jefferson	SRWMD	0.22	0.16	0.18	0.19	0.17	3,574	4,676	3,554	3,552	3,600	49	4,676	4,717	4,797	4,849	4,876	4,929	41	80	52	27	53	26	0.00	0.00	0.00	0.00	0.00	0.00	
Lafayette	SRWMD	0.32	0.33	0.32	0.33	0.28	6,972	8,664	7,000	7,085	7,094	43	8,664	8,700	9,100	9,400	9,700	9,900	36	400	300	300	200	200	0.00	0.02	0.01	0.01	0.01	0.01	
Levy	SRWMD	0.15	0.16	0.14	0.13	0.13	18,661	18,287	18,697	19,015	18,709	8	18,287	18,581	19,072	19,474	19,787	20,055	294	491	402	313	268	268	0.00	0.00	0.00	0.00	0.00	0.00	
Madison	SRWMD	0.83	1.00	0.87	1.00	0.90	17,663	19,200	17,713	17,704	17,812	51	19,200	19,422	19,722	19,922	20,022	20,222	222	300	200	100	200	100	0.01	0.02	0.01	0.01	0.01	0.01	
Taylor	SRWMD	1.89	0.21	0.21	0.21	0.20	19,760	22,824	19,698	19,866	20,068	27	22,824	22,600	23,200	23,600	24,000	24,300	-224	600	400	400	300	400	-0.01	0.02	0.01	0.01	0.01	0.01	
SRWMD Western Planning Region Total		3.61	2.06	1.93	1.98	1.80	81,696	90,119	81,753	82,298	82,101	27	90,119	90,720	92,791	94,245	95,485	96,506	97,500	601	2,071	1,454	1,240	1,021	994	0.00	0.06	0.03	0.03	0.03	0.03

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.
- 3.) 2014 - 2018 water use data source is NFSEG master geodatabase with metered and estimated commercial / industrial / institutional and mining / dewatering water use.
- 4.) 2014 - 2018 population obtained from Technical Staff Reports, BEBR estimates of population, DEP MOR and Basic Facility Report Data, parcel data, published annual reports, and permittee surveys.
- 5.) Projected population for years 2020 - 2045 are based on BEBR Population Projections: Volume 53, Bulletin 186, Published January 2020, using a parcel population projection model.
- 6.) Taylor County projections were adjusted to hold pulp, paper mill, and large industrial quantities constant; total water use shown for calculations does not include pulp, paper mill, and large industrial quantities.

Table A-12 (SRWMD - Western Planning Region). Public Supply and Domestic Self-supply and Small Public Supply 2015 Water Use, 5-in-10 Year Water Demand Projections for 2020-2045, and 1-in-10 Year Water Demand Projections for 2045, by County, in the Western Planning Region of the Suwannee River Water Management District.

County	District	2015 Water Use			2020 Demand Projections (5-in-10)			2025 Demand Projections (5-in-10)			2030 Demand Projections (5-in-10)			2035 Demand Projections (5-in-10)			2040 Demand Projections (5-in-10)			2045 Demand Projections (5-in-10)			Percent Change 2015-2045			2045 Demand Projections (1-in-10)		
		Public Supply	Domestic Self-Supply and Small Public Supply	Total	Public Supply	Domestic Self-Supply and Small Public Supply	Total	Public Supply	Domestic Self-Supply and Small Public Supply	Total	Public Supply	Domestic Self-Supply and Small Public Supply	Total	Public Supply	Domestic Self-Supply and Small Public Supply	Total	Public Supply	Domestic Self-Supply and Small Public Supply	Total	Public Supply	Domestic Self-Supply and Small Public Supply	Total	Public Supply	Domestic Self-Supply and Small Public Supply	Total	Public Supply	Domestic Self-Supply and Small Public Supply	Total
Dixie	SRWMD	0.65	1.21	1.86	0.80	1.18	1.98	0.84	1.18	2.02	0.87	1.19	2.06	0.87	1.19	2.06	0.87	1.19	2.06	0.87	1.19	2.06	34%	-2%	11%	0.92	1.26	2.18
Jefferson	SRWMD	0.00	0.25	0.25	0.00	0.25	0.25	0.00	0.25	0.25	0.00	0.25	0.25	0.00	0.25	0.25	0.00	0.25	0.25	0.00	0.25	0.25	N/A	4%	4%	0.00	0.28	0.28
Lafayette	SRWMD	0.15	0.55	0.70	0.16	0.60	0.76	0.16	0.64	0.80	0.16	0.67	0.83	0.16	0.70	0.86	0.16	0.74	0.88	0.16	0.74	0.90	7%	35%	29%	0.17	0.78	0.95
Levy	SRWMD	0.68	0.92	1.60	0.61	0.88	1.49	0.62	0.90	1.52	0.64	0.92	1.56	0.64	0.94	1.58	0.65	0.96	1.61	0.66	0.98	1.64	-3%	7%	2%	0.70	1.03	1.73
Madison	SRWMD	1.14	0.71	1.85	1.27	0.70	1.97	1.29	0.71	2.00	1.31	0.72	2.03	1.31	0.72	2.03	1.32	0.73	2.05	1.33	0.73	2.06	17%	3%	11%	1.41	0.77	2.18
Taylor	SRWMD	1.74	0.59	2.33	1.86	0.60	2.46	1.93	0.60	2.53	1.96	0.59	2.55	1.99	0.59	2.58	2.03	0.59	2.62	2.06	0.59	2.65	18%	0%	14%	2.18	0.62	2.80
SRWMD Western Planning Region Total		4.36	4.23	8.59	4.70	4.21	8.91	4.84	4.28	9.12	4.94	4.35	9.29	4.97	4.40	9.37	5.03	4.45	9.48	5.08	4.49	9.57	17%	6%	11%	5.38	4.74	10.12

Notes:

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.
- 3.) Water use for the Public Supply category includes groundwater, surface water, and water from the Other category.

Table A-13 (15 - Dixie County). Water Use for 2015 and 5-in-10 Year Total Water Demand Projections for 2020-2045 and 1-in-10 Year Water Demand Projections for 2045, by Category of Use in Dixie County in the Suwannee River Water Management District for the Western Planning Region.

Category	District	Water Use			Demand Projections (5-in-10)															Percent Change 2015-2045	Demand Projections (1-in-10)								
		2015			2020			2025			2030			2035			2040				2045			2045					
		Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total		Ground	Surface	Total	Ground	Surface	Total			
Public Supply	SRWMD	0.65	0.00	0.65	0.80	0.00	0.80	0.84	0.00	0.84	0.87	0.00	0.87	0.87	0.00	0.87	0.87	0.00	0.87	0.87	0.00	0.87	0.87	0.00	0.87	34%	0.92	0.00	0.92
Domestic Self-supply and Small Public Supply Systems	SRWMD	1.21	0.00	1.21	1.18	0.00	1.18	1.18	0.00	1.18	1.19	0.00	1.19	1.19	0.00	1.19	1.19	0.00	1.19	1.19	0.00	1.19	1.19	0.00	1.19	-2%	1.26	0.00	1.26
Agricultural Irrigation Self-supply	SRWMD	6.81	0.00	6.81	5.56	0.00	5.56	6.01	0.00	6.01	6.45	0.00	6.45	6.86	0.00	6.86	7.36	0.00	7.36	7.73	0.00	7.73	7.73	0.00	7.73	14%	9.97	0.00	9.97
Landscape / Recreational Self-supply	SRWMD	0.12	0.00	0.12	0.12	0.00	0.12	0.12	0.00	0.12	0.12	0.00	0.12	0.12	0.00	0.12	0.12	0.00	0.12	0.12	0.00	0.12	0.12	0.00	0.12	0%	0.12	0.00	0.12
Commercial / Industrial / Institutional Self-supply	SRWMD	0.20	0.00	0.20	0.20	0.00	0.20	0.20	0.00	0.20	0.20	0.00	0.20	0.20	0.00	0.20	0.20	0.00	0.20	0.20	0.00	0.20	0.20	0.00	0.20	0%	0.20	0.00	0.20
Power Generation Self-supply	SRWMD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	0.00	0.00	0.00
Dixie County Total		8.99	0.00	8.99	7.86	0.00	7.86	8.35	0.00	8.35	8.83	0.00	8.83	9.24	0.00	9.24	9.74	0.00	9.74	10.11	0.00	10.11	10.11	0.00	10.11	12%	12.47	0.00	12.47

Notes:

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.

Table A-13 (16 - Jefferson County). Water Use for 2015 and 5-in-10 Year Total Water Demand Projections for 2020-2045 and 1-in-10 Year Water Demand Projections for 2045, by Category of Use in Jefferson County in the Suwannee River Water Management District for the Western Planning Region.

Category	District	Water Use			Demand Projections (5-in-10)															Percent Change 2015-2045	Demand Projections (1-in-10)								
		2015			2020			2025			2030			2035			2040				2045			2045					
		Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total		Ground	Surface	Total	Ground	Surface	Total			
Public Supply	SRWMD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	0.00	0.00	0.00
Domestic Self-supply and Small Public Supply Systems	SRWMD	0.25	0.00	0.25	0.25	0.00	0.25	0.25	0.00	0.25	0.26	0.00	0.26	0.26	0.00	0.26	0.26	0.00	0.26	0.26	0.00	0.26	0.26	0.00	0.26	4%	0.28	0.00	0.28
Agricultural Irrigation Self-supply	SRWMD	3.27	0.02	3.29	2.72	0.02	2.74	2.73	0.02	2.75	2.74	0.02	2.76	2.77	0.02	2.79	2.78	0.02	2.80	2.81	0.02	2.83	2.81	0.02	2.83	-14%	3.44	0.02	3.46
Landscape / Recreational Self-supply	SRWMD	0.09	0.00	0.09	0.09	0.00	0.09	0.09	0.00	0.09	0.09	0.00	0.09	0.09	0.00	0.09	0.09	0.00	0.09	0.09	0.00	0.09	0.09	0.00	0.09	0%	0.12	0.00	0.12
Commercial / Industrial / Institutional Self-supply	SRWMD	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0%	0.16	0.00	0.16
Power Generation Self-supply	SRWMD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	0.00	0.00	0.00
Jefferson County Total		3.77	0.02	3.79	3.22	0.02	3.24	3.23	0.02	3.25	3.25	0.02	3.27	3.28	0.02	3.30	3.29	0.02	3.31	3.32	0.02	3.34	3.32	0.02	3.34	-12%	4.00	0.02	4.02

Notes:

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.

Table A-13 (17 - Lafayette County). Water Use for 2015 and 5-in-10 Year Total Water Demand Projections for 2020-2045 and 1-in-10 Year Water Demand Projections for 2045, by Category of Use in Lafayette County in the Suwannee River Water Management District for the Western Planning Region.

Category	District	Water Use			Demand Projections (5-in-10)															Percent Change 2015-2045	Demand Projections (1-in-10)								
		2015			2020			2025			2030			2035			2040				2045			2045					
		Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total		Ground	Surface	Total	Ground	Surface	Total			
Public Supply	SRWMD	0.15	0.00	0.15	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	7%	0.17	0.00	0.17
Domestic Self-supply and Small Public Supply Systems	SRWMD	0.55	0.00	0.55	0.60	0.00	0.60	0.64	0.00	0.64	0.67	0.00	0.67	0.70	0.00	0.70	0.72	0.00	0.72	0.74	0.00	0.74	0.74	0.00	0.74	35%	0.78	0.00	0.78
Agricultural Irrigation Self-supply	SRWMD	11.76	0.00	11.76	11.40	0.00	11.40	12.43	0.00	12.43	13.36	0.00	13.36	14.27	0.00	14.27	15.30	0.00	15.30	16.23	0.00	16.23	16.23	0.00	16.23	38%	20.50	0.00	20.50
Landscape / Recreational Self-supply	SRWMD	0.06	0.00	0.06	0.06	0.00	0.06	0.06	0.00	0.06	0.06	0.00	0.06	0.06	0.00	0.06	0.06	0.00	0.06	0.06	0.00	0.06	0.06	0.00	0.06	0%	0.06	0.00	0.06
Commercial / Industrial / Institutional Self-supply	SRWMD	0.33	0.00	0.33	0.33	0.00	0.33	0.35	0.00	0.35	0.36	0.00	0.36	0.37	0.00	0.37	0.38	0.00	0.38	0.39	0.00	0.39	0.39	0.00	0.39	18%	0.39	0.00	0.39
Power Generation Self-supply	SRWMD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	0.00	0.00	0.00
Lafayette County Total		12.85	0.00	12.85	12.55	0.00	12.55	13.64	0.00	13.64	14.61	0.00	14.61	15.56	0.00	15.56	16.62	0.00	16.62	17.58	0.00	17.58	17.58	0.00	17.58	37%	21.90	0.00	21.90

Notes:

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.

Table A-13 (18 - Levy County). Water Use for 2015 and 5-in-10 Year Total Water Demand Projections for 2020-2045 and 1-in-10 Year Water Demand Projections for 2045, by Category of Use in Levy County in the Suwannee River Water Management District for the Western Planning Region.

Category	District	Water Use			Demand Projections (5-in-10)															Percent Change 2015-2045	Demand Projections (1-in-10)					
		2015			2020			2025			2030			2035			2040				2045			2045		
		Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total		Ground	Surface	Total	Ground	Surface	Total
Public Supply	SRWMD	0.68	0.00	0.68	0.61	0.00	0.61	0.62	0.00	0.62	0.64	0.00	0.64	0.64	0.00	0.64	0.65	0.00	0.65	0.66	0.00	0.66	-3%	0.70	0.00	0.70
Domestic Self-supply and Small Public Supply Systems	SRWMD	0.92	0.00	0.92	0.88	0.00	0.88	0.90	0.00	0.90	0.92	0.00	0.92	0.94	0.00	0.94	0.96	0.00	0.96	0.98	0.00	0.98	7%	1.03	0.00	1.03
Agricultural Irrigation Self-supply	SRWMD	14.80	0.00	14.80	14.28	0.00	14.28	15.76	0.00	15.76	17.14	0.00	17.14	18.36	0.00	18.36	19.75	0.00	19.75	20.96	0.00	20.96	42%	26.53	0.00	26.53
Landscape / Recreational Self-supply	SRWMD	0.21	0.00	0.21	0.21	0.00	0.21	0.22	0.00	0.22	0.22	0.00	0.22	0.22	0.00	0.22	0.22	0.00	0.22	0.22	0.00	0.22	5%	0.25	0.00	0.25
Commercial / Industrial / Institutional Self-supply	SRWMD	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0.16	0.00	0.16	0%	0.16	0.00	0.16
Power Generation Self-supply	SRWMD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	0.00	0.00	0.00
Levy County Total		16.77	0.00	16.77	16.14	0.00	16.14	17.66	0.00	17.66	19.08	0.00	19.08	20.32	0.00	20.32	21.74	0.00	21.74	22.98	0.00	22.98	37%	28.67	0.00	28.67

Notes:

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.

Table A-13 (19 - Madison County). Water Use for 2015 and 5-in-10 Year Total Water Demand Projections for 2020-2045 and 1-in-10 Year Water Demand Projections for 2045, by Category of Use in Madison County in the Suwannee River Water Management District for the Western Planning Region.

Category	District	Water Use			Demand Projections (5-in-10)															Percent Change 2015-2045	Demand Projections (1-in-10)					
		2015			2020			2025			2030			2035			2040				2045			2045		
		Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total		Ground	Surface	Total	Ground	Surface	Total
Public Supply	SRWMD	1.14	0.00	1.14	1.27	0.00	1.27	1.29	0.00	1.29	1.31	0.00	1.31	1.31	0.00	1.31	1.32	0.00	1.32	1.33	0.00	1.33	17%	1.41	0.00	1.41
Domestic Self-supply and Small Public Supply Systems	SRWMD	0.71	0.00	0.71	0.70	0.00	0.70	0.71	0.00	0.71	0.72	0.00	0.72	0.72	0.00	0.72	0.73	0.00	0.73	0.73	0.00	0.73	3%	0.77	0.00	0.77
Agricultural Irrigation Self-supply	SRWMD	20.87	0.00	20.87	21.50	0.00	21.50	22.43	0.00	22.43	23.20	0.00	23.20	24.12	0.00	24.12	25.06	0.00	25.06	26.03	0.00	26.03	25%	33.01	0.00	33.01
Landscape / Recreational Self-supply	SRWMD	0.32	0.00	0.32	0.32	0.00	0.32	0.33	0.00	0.33	0.33	0.00	0.33	0.33	0.00	0.33	0.33	0.00	0.33	0.33	0.00	0.33	3%	0.35	0.00	0.35
Commercial / Industrial / Institutional Self-supply	SRWMD	1.00	0.00	1.00	1.01	0.00	1.01	1.03	0.00	1.03	1.04	0.00	1.04	1.05	0.00	1.05	1.06	0.00	1.06	1.07	0.00	1.07	7%	1.07	0.00	1.07
Power Generation Self-supply	SRWMD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	0.00	0.00	0.00
Madison County Total		24.04	0.00	24.04	24.80	0.00	24.80	25.79	0.00	25.79	26.60	0.00	26.60	27.53	0.00	27.53	28.50	0.00	28.50	29.49	0.00	29.49	23%	36.61	0.00	36.61

Notes:

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.

Table A-13 (20 - Taylor County). Water Use for 2015 and 5-in-10 Year Total Water Demand Projections for 2020-2045 and 1-in-10 Year Water Demand Projections for 2045, by Category of Use in Taylor County in the Suwannee River Water Management District for the Western Planning Region.

Category	District	Water Use			Demand Projections (5-in-10)															Percent Change 2015-2045	Demand Projections (1-in-10)					
		2015			2020			2025			2030			2035			2040				2045			2045		
		Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total	Ground	Surface	Total		Ground	Surface	Total	Ground	Surface	Total
Public Supply	SRWMD	1.74	0.00	1.74	1.86	0.00	1.86	1.93	0.00	1.93	1.96	0.00	1.96	1.99	0.00	1.99	2.03	0.00	2.03	2.06	0.00	2.06	18%	2.18	0.00	2.18
Domestic Self-supply and Small Public Supply Systems	SRWMD	0.59	0.00	0.59	0.60	0.00	0.60	0.60	0.00	0.60	0.59	0.00	0.59	0.59	0.00	0.59	0.59	0.00	0.59	0.59	0.00	0.59	0%	0.62	0.00	0.62
Agricultural Irrigation Self-supply	SRWMD	0.46	0.00	0.46	0.52	0.00	0.52	0.51	0.00	0.51	0.51	0.00	0.51	0.50	0.00	0.50	0.50	0.00	0.50	0.49	0.00	0.49	7%	0.64	0.00	0.64
Landscape / Recreational Self-supply	SRWMD	0.35	0.00	0.35	0.35	0.00	0.35	0.36	0.00	0.36	0.37	0.00	0.37	0.38	0.00	0.38	0.38	0.00	0.38	0.39	0.00	0.39	11%	0.44	0.00	0.44
Commercial / Industrial / Institutional Self-supply	SRWMD	39.50	0.17	39.67	39.49	0.17	39.66	39.51	0.17	39.68	39.52	0.17	39.69	39.53	0.17	39.70	39.54	0.17	39.71	39.55	0.17	39.72	0%	39.55	0.17	39.72
Power Generation Self-supply	SRWMD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	0.00	0.00	0.00
Taylor County Total		42.64	0.17	42.81	42.82	0.17	42.99	42.91	0.17	43.08	42.95	0.17	43.12	42.99	0.17	43.16	43.04	0.17	43.21	43.08	0.17	43.25	1%	43.43	0.17	43.60

Notes:

- 1.) All water use is shown in million gallons per day.
- 2.) Rounding errors account for nominal discrepancies.

Table A-14. 2045 Reclaimed Water Projections Using 2018 Percent Beneficial Utilization for the WWSP.

County	District	Waste Water Treatment Facility Name	Reuse System Name	WAFR ID	PAA	2018	Associated CUP	2018 Total Facility Treatment Flow	2018 Total Beneficial Reuse	Potential Existing Additional Reclaimed Water for Reuse	2018 Population	2045 Population	2045 Additional Population Hooked up to Sewer System	2045 New Waste Water Flow	2045 Potential New Additional Reclaimed Water for Reuse	2045 Total Potential Additional Reclaimed Water for Reuse	2045 Total Facility Treatment Flow	2018 Percent Utilization
Dixie	SRWMD	Cross City WWTF	Cross City WWTF	FL0027791	Yes	High	216823	0.28	0.52	-0.43	1,696	2,267	542	0.04	0.07	-0.36	0.32	184%
Dixie County - SRWMD Total								0.28	0.52	-0.43	1,696	2,267	542	0.04	0.07	-0.36	0.32	184%
Jefferson	SRWMD	Jefferson Correctional Institution	Jefferson Correctional Institution	FLA011642	Yes	High	N/A	0.15	0.16	-0.01	0	0	N/A	0.00	0.00	-0.01	0.15	103%
Jefferson County - SRWMD Total								0.15	0.16	-0.01	0	0	N/A	0.00	0.00	-0.01	0.15	103%
Lafayette	SRWMD	Mayo WWTF	Mayo, Town of	FLA011643	No	Basic	216851	0.08	0.08	0.00	1,208	1,214	6	0.00	0.00	0.00	0.08	100%
Lafayette	SRWMD	Mayo Correctional Institution	Mayo Correctional Institution	FLA011646	No	Basic	N/A	0.12	0.12	0.00	0	0	N/A	0.00	0.00	0.00	0.12	100%
Lafayette County - SRWMD Total								0.20	0.20	0.00	1,208	1,214	6	0.00	0.00	0.00	0.20	100%
Levy	SRWMD	Cedar Key WRF	Cedar Key	FL0031216	Yes	High	216821	0.09	0.09	0.00	2,304	2,304	0	0.00	0.00	0.00	0.09	100%
Levy	SRWMD	Chiefland WWTF	Chiefland	FLA011648	No	Basic	216826	0.24	0.24	0.00	2,229	2,651	401	0.03	0.03	0.03	0.27	100%
Levy County - SRWMD Total								0.33	0.33	0.00	4,533	4,955	401	0.03	0.03	0.03	0.36	100%
Madison	SRWMD	Greenville, Town of	Greenville, Town of	FLA011658	No	Basic	217127	0.09	0.09	0.00	796	796	0	0.00	0.00	0.00	0.09	100%
Madison	SRWMD	Madison, City of	Madison, City of	FLA116572	No	Basic	216506	0.72	0.72	0.00	3,969	4,200	219	0.02	0.02	0.02	0.74	100%
Madison County - SRWMD Total								0.82	0.82	0.00	4,765	4,996	219	0.02	0.02	0.02	0.83	100%
Taylor	SRWMD	Perry, City of	Perry, City of	FL0026387	Yes	High	216835	0.94	0.94	0.00	6,919	6,919	0	0.00	0.00	0.00	0.94	100%
Taylor	SRWMD	Taylor Correctional Institution	Taylor Correctional Institution	FLA011831	No	Basic	N/A	0.16	0.16	0.00	0	0	N/A	0.00	0.00	0.00	0.16	100%
Taylor County - SRWMD Total								1.10	1.10	0.00	6,919	6,919	0	0.00	0.00	0.00	1.10	100%
Total								2.87	3.12	-0.44	19,121	20,351	1,169	0.09	0.12	-0.32	2.96	108%

Notes:

- 1.) All estimates of reclaimed water and reuse flow are shown in million gallons per day.
- 2.) Rounding anomalies account for nominal discrepancies.
- 3.) 2018 Total facility treatment flow obtained from DEP 2018 Annual Reuse Inventory.
- 4.) Beneficial reuse consists of uses in which reclaimed water takes the place of a pre-existing or potential use of higher quality water for which reclaimed water is suitable and as such does not match DEP's broader definition of reuse.
- 5.) Potential existing additional reclaimed water for reuse calculated using the 2018 percent beneficial utilization of the 2018 total facility treatment flow minus the 2018 total beneficial reuse.
- 6.) Additional population hooked up to the sewer system calculated as 95 percent of the additional population growth within a service area from 2018 to 2045.
- 7.) New waste water flow calculated as additional population hooked up to the sewer system times 73 gpcd (58.6 gpcd for residential flow, AWWA indoor standard and 15 gpcd for commercial flow, National Engineering Handbook per employee).
- 8.) Potential new additional reclaimed water for reuse calculated using the 2018 percent beneficial utilization of the new waste water flow.
- 9.) Total potential additional reclaimed water for reuse calculated as potential existing additional reclaimed water for reuse plus potential new additional reclaimed water for reuse.
- 10.) 2045 Total facility treatment flow calculated as 2018 total facility treatment flow plus 2045 new waste water flow.
- 11.) Projections are grouped by population expected to growth within a public supply service area. Therefore, the projections by wastewater facility (WWTF) may not be specific to the WWTF, but as the region as a whole.
- 12.) Projections are not included for those service areas that do not currently have waste water treatment facilities.

Table A-15. 2045 Reclaimed Water Projections Using 75 Percent Beneficial Utilization for the WWSP.

County	District	Waste Water Treatment Facility Name	Reuse System Name	WAFR ID	PAA	2018	Associated CUP	2018 Total Facility Treatment Flow	2018 Total Beneficial Reuse	Potential Existing Additional Reclaimed Water for Reuse	2018 Population	2045 Population	2045 Additional Population Hooked up to Sewer System	2045 New Waste Water Flow	2045 Potential New Additional Reclaimed Water for Reuse	2045 Total Potential Additional Reclaimed Water for Reuse	2045 Total Facility Treatment Flow	At least 75% Utilization
Dixie	SRWMD	Cross City WWTF	Cross City WWTF	FL0027791	Yes	High	216823	0.28	0.52	-0.18	1,696	2,267	542	0.04	0.03	-0.15	0.32	75%
Dixie County - SRWMD Total								0.28	0.52	-0.18	1,696	2,267	542	0.04	0.03	-0.15	0.32	75%
Jefferson	SRWMD	Jefferson Correctional Institution	Jefferson Correctional Institution	FLA011642	Yes	High	N/A	0.15	0.16	0.00	0	0	N/A	0.00	0.00	0.00	0.15	75%
Jefferson County - SRWMD Total								0.15	0.16	0.00	0	0	N/A	0.00	0.00	0.00	0.15	75%
Lafayette	SRWMD	Mayo WWTF	Mayo, Town of	FLA011643	No	Basic	216851	0.08	0.08	0.00	1,208	1,214	6	0.00	0.00	0.00	0.08	75%
Lafayette	SRWMD	Mayo Correctional Institution	Mayo Correctional Institution	FLA011646	No	Basic	N/A	0.12	0.12	0.00	0	0	N/A	0.00	0.00	0.00	0.12	75%
Lafayette County - SRWMD Total								0.20	0.20	0.00	1,208	1,214	6	0.00	0.00	0.00	0.20	75%
Levy	SRWMD	Cedar Key WRF	Cedar Key	FL0031216	Yes	High	216821	0.09	0.09	0.00	2,304	2,304	0	0.00	0.00	0.00	0.09	75%
Levy	SRWMD	Chiefland WWTF	Chiefland	FLA011648	No	Basic	216826	0.24	0.24	0.00	2,229	2,651	401	0.03	0.02	0.02	0.27	75%
Levy County - SRWMD Total								0.33	0.33	0.00	4,533	4,955	401	0.03	0.02	0.02	0.36	75%
Madison	SRWMD	Greenville, Town of	Greenville, Town of	FLA011658	No	Basic	217127	0.09	0.09	0.00	796	796	0	0.00	0.00	0.00	0.09	75%
Madison	SRWMD	Madison, City of	Madison, City of	FLA116572	No	Basic	216506	0.72	0.72	0.00	3,969	4,200	219	0.02	0.01	0.01	0.74	75%
Madison County - SRWMD Total								0.82	0.82	0.00	4,765	4,996	219	0.02	0.01	0.01	0.83	75%
Taylor	SRWMD	Perry, City of	Perry, City of	FL0026387	Yes	High	216835	0.94	0.94	0.00	6,919	6,919	0	0.00	0.00	0.00	0.94	75%
Taylor	SRWMD	Taylor Correctional Institution	Taylor Correctional Institution	FLA011831	No	Basic	N/A	0.16	0.16	0.00	0	0	N/A	0.00	0.00	0.00	0.16	75%
Taylor County - SRWMD Total								1.10	1.10	0.00	6,919	6,919	0	0.00	0.00	0.00	1.10	75%
Total								2.87	3.12	-0.18	19,121	20,351	1,169	0.09	0.06	-0.12	2.96	75%

Notes:

- 1.) All estimates of reclaimed water and reuse flow are shown in million gallons per day.
- 2.) Rounding anomalies account for nominal discrepancies.
- 3.) 2018 Total facility treatment flow obtained from DEP 2018 Annual Reuse Inventory.
- 4.) Beneficial reuse for SRWMD consists of uses in which reclaimed water takes the place of a pre-existing or potential use of higher quality water for which reclaimed water is suitable and as such does not match DEP's broader definition of reuse.
- 5.) Potential existing additional reclaimed water for reuse calculated using 75 percent beneficial utilization of the 2018 total facility treatment flow minus the 2018 total beneficial reuse.
- 6.) Additional population hooked up to the sewer system calculated as 95 percent of the additional population growth within a service area from 2018 to 2045.
- 7.) New waste water flow calculated as additional population hooked up to the sewer system times 73 gpcd (58.6 gpcd for residential flow, AWWA indoor standard and 15 gpcd for commercial flow, National Engineering Handbook per employee).
- 8.) Potential new additional reclaimed water for reuse calculated using 75 percent beneficial utilization of the new waste water flow.
- 9.) Total potential additional reclaimed water for reuse calculated as potential existing additional reclaimed water for reuse plus potential new additional reclaimed water for reuse.
- 10.) 2045 Total facility treatment flow calculated as 2018 total facility treatment flow plus 2045 new waste water flow.
- 11.) Projections are grouped by population expected to growth within a public supply service area. Therefore, the projections by wastewater facility (WWTF) may not be specific to the WWTF, but as the region as a whole.
- 12.) Projections are not included for those service areas that do not currently have waste water treatment facilities.

Table A-16. 2045 Reclaimed Water Projections for the Western Planning Region area of the Suwannee River Water Management District.

County	District	Estimates Using WWTF 2018 Percent Beneficial Utilization Rate						Estimates Using DEP Beneficial Utilization Rate of 75 Percent							
		2018 Total Facility Treatment Flow	2018 Total Beneficial Reuse	Potential Existing Additional Reclaimed Water for Reuse	2045 New Waste Water Flow	2045 Potential New Additional Reclaimed Water for Reuse	2045 Total Potential Additional Reclaimed Water for Reuse	2045 Total Facility Treatment Flow	2018 Total Facility Treatment Flow	2018 Total Beneficial Reuse	Potential Existing Additional Reclaimed Water for Reuse	2045 New Waste Water Flow	2045 Potential New Additional Reclaimed Water for Reuse	2045 Total Potential Additional Reclaimed Water for Reuse	2045 Total Facility Treatment Flow
Dixie	SRWMD	0.28	0.52	-0.43	0.04	0.07	-0.36	0.32	0.28	0.52	-0.18	0.04	0.03	-0.15	0.32
Jefferson	SRWMD	0.15	0.16	-0.01	0.00	0.00	-0.01	0.15	0.15	0.16	0.00	0.00	0.00	0.00	0.15
Lafayette	SRWMD	0.20	0.20	0.00	0.00	0.00	0.00	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.20
Levy	SRWMD	0.33	0.33	0.00	0.03	0.03	0.03	0.36	0.33	0.33	0.00	0.03	0.02	0.02	0.36
Madison	SRWMD	0.82	0.82	0.00	0.02	0.02	0.02	0.83	0.82	0.82	0.00	0.02	0.01	0.01	0.83
Taylor	SRWMD	1.10	1.10	0.00	0.00	0.00	0.00	1.10	1.10	1.10	0.00	0.00	0.00	0.00	1.10
Western Planning Region Total		2.87	3.12	-0.44	0.09	0.12	-0.32	2.96	2.87	3.12	-0.18	0.09	0.06	-0.12	2.96

Notes:

- 1.) All estimates of reclaimed water and reuse flow are shown in million gallons per day.
- 2.) Rounding anomalies account for nominal discrepancies.
- 3.) 2018 Total facility treatment flow obtained from DEP 2018 Annual Reuse Inventory.
- 4.) Beneficial reuse for SJRWMD and SRWMD consists of uses in which reclaimed water takes the place of a pre-existing or potential use of higher quality water for which reclaimed water is suitable and as such does not match DEP's broader definition of reuse.
- 5.) Total potential additional reclaimed water for reuse calculated as potential existing additional reclaimed water for reuse plus potential new additional reclaimed water for reuse.
- 6.) 2045 Total facility treatment flow calculated as 2018 total facility treatment flow plus 2045 new waste water flow.
- 7.) Projections are not included for those service areas that do not currently have waste water treatment facilities.

Table A-17. First Scenario of Potential Water Conservation for the Western Planning Region of the Suwannee River Water Management District.

Category	District	Projected 2045 Water Demand	First Conservation Scenario	
			Percent Conservation	Projected 2045 Water Conservation
Public Supply	SRWMD	5.08	7.0%	0.36
Domestic Self-supply and Small Public Supply Systems	SRWMD	4.49	3.5%	0.16
Agricultural Irrigation Self-supply	SRWMD	74.27	N/A	11.79
Landscape / Recreational Self-supply	SRWMD	1.22	4.7%	0.06
Commercial / Industrial / Institutional Self-supply	SRWMD	41.75	2.2%	0.92
Power Generation Self-supply	SRWMD	0.00	13.8%	0.00
SRWMD Western Planning Region Total		126.81	31.2%	13.28

Notes:

- 1.) First Conservation Scenario - Percent of potential conservation for public supply, domestic self-supply, landscape/recreational self-supply, commercial/industrial/institutional self-supply, and power generation self-supply were based on the 2020 CFWI estimated percent savings.
- 2.) First Conservation Scenario - Agriculture is based on the Florida Department of Agriculture and Consumer Services Florida Statewide Agricultural Irrigation Demand VII Balmoral deliverable.
- 3.) Projected 2045 water demand and 2045 conservation potential are shown in million gallons per day.

*Interactive FSAID Power BI Conservation Slide 5

<https://app.powerbi.com/view?r=eyJoiIjoiNzBkZmI0YjY1YThiYjY0OWY0LTZjZjRkNTNTNTNjRmYTMxIiwidCI6ImNkZiIiwzOmQ4LTUzYzgtNDAsZC1hZDVlTM4NDVmNjIiYjY0YjY0ZC1sImMiOjI9>

Table A-18. Average Gross Per Capita Scenario for Potential Public Supply Conservation in in the Western Planning Region of the Suwannee River Water Management District.

County	Utility	Permit Number	2045 Population Projection	2045 Water Demand Projection	Utility-Level 2014-2018 Average Gross Per Capita	2014-2018 Average Gross Per Capita for Part II	New 2045 Water Demand if Utility-Level Average Gross Per Capita is limited to the Average Gross for Part II	Potential Reduction in 2045 Water Demand	Potential Reduction in 2045 Water Demand (Percent)
Dixie - SRWMD	Town of Cross City	216823	2,267	0.75	331	174	0.39	-0.36	-47.4%
	Town of Suwannee	216831	302	0.07	239	174	0.05	-0.02	-24.9%
	Town of Horseshoe Beach	217129	167	0.05	276	174	0.03	-0.02	-41.9%
	NCRWA Old Town (Also in Gilchrist and Levy)	220310	425	0.00	0	174	0.00	N/A	N/A
	SRWMD Dixie Total		3,161	0.87	N/A	174	0.48	-0.39	-45.3%
Jefferson - SRWMD	Jefferson Communities Water System Inc.	218662	644	0.00	N/A	174	0.00	N/A	N/A
	SRWMD Jefferson Total		644	0.00	N/A	174	0.00	N/A	N/A
Lafayette - SRWMD	Town of Mayo	216851	1,214	0.16	133	174	0.16	0.00	0.0%
	SRWMD Lafayette Total		1,214	0.16	N/A	174	0.16	0.00	0.0%
Levy - SRWMD	Cedar Key SP Water & Sewer District	216821	2,304	0.13	58	174	0.13	0.00	0.0%
	City of Chiefland	216826	2,651	0.36	135	174	0.36	0.00	0.0%
	Town of Bronson	216830	1,133	0.15	132	174	0.15	0.00	0.0%
	City of Fanning Springs (Also in Dixie and Gilchrist)	220310	177	0.02	94	174	0.02	0.00	0.0%
	SRWMD Levy Total		6,265	0.66	N/A	174	0.66	0.00	0.0%
Madison - SRWMD	City of Madison	216506	4,200	1.10	263	174	0.73	-0.37	-33.6%
	Town of Greenville	217127	796	0.11	142	174	0.11	0.00	0.0%
	Town of Lee	218663	346	0.07	208	174	0.06	-0.01	-14.0%
	Cherry Lake Utilities Corporation Inc.	219588	664	0.05	81	174	0.05	0.00	0.0%
	SRWMD Madison Total		6,006	1.33	N/A	174	0.95	-0.38	-28.5%
Taylor - SRWMD	City of Perry	216835	6,919	1.49	215	174	1.20	-0.29	-19.2%
	Big Bend Water Authority	220484	5,289	0.50	95	174	0.50	0.00	0.0%
	Taylor Coastal	221166	1,623	0.07	41	174	0.07	0.00	0.0%
	SRWMD Taylor Total		13,831	2.06	N/A	174	1.77	-0.29	-13.9%
Region II Total			31,121	5.08	N/A	N/A	4.02	-1.06	-20.8%
					Part II 2014-2018 Average Gross Per Capita	174			

Notes:

1.) Projected 2045 water demand and potential reduction is shown in million gallons per day.

Table A-19. Range of Potential Water Conservation for the Western Planning Region of the Suwannee River Water Management District.

County	Category	Projected 2045 Water Demand	Second Conservation Scenario	
			Percent Conservation	Projected 2045 Water Conservation
Dixie - SRWMD	Public Supply	0.87	45.28%	0.39
	Domestic Self-supply and Small Public Supply Systems	1.19	45.28%	0.54
	Total	2.06	45.28%	0.93
Jefferson - SRWMD	Public Supply	0.00	N/A	N/A
	Domestic Self-supply and Small Public Supply Systems	0.26	N/A	N/A
	Total	0.26	0.00%	0.00
Lafayette - SRWMD	Public Supply	0.16	0.00%	0.00
	Domestic Self-supply and Small Public Supply Systems	0.74	0.00%	0.00
	Total	0.90	0.00%	0.00
Levy - SRWMD	Public Supply	0.66	0.00%	0.00
	Domestic Self-supply and Small Public Supply Systems	0.98	0.00%	0.00
	Total	1.64	0.00%	0.00
Madison - SRWMD	Public Supply	1.33	28.50%	0.38
	Domestic Self-supply and Small Public Supply Systems	0.73	28.50%	0.21
	Total	2.06	28.50%	0.59
Taylor - SRWMD	Public Supply	2.06	13.89%	0.29
	Domestic Self-supply and Small Public Supply Systems	0.59	13.89%	0.08
	Total	2.65	13.89%	0.37
Western Planning Region Total	Public Supply	5.08	20.85%	1.06
	Domestic Self-supply and Small Public Supply Systems	4.49	18.46%	0.83
	Total	9.57	19.73%	1.89

Notes:

- 1.) Second Conservation Scenario - Public supply is based on savings achieved if each Part 2014-2018 average gross per capita rate was met by respective utilities. The same percent savings are applied to the domestic self-supply category.
- 2.) Projected 2045 water demand and 2045 water conservation potential is shown in million gallons per day.

Population Estimation and Projection Technical Memorandum (2014-2018)

Overview

The Suwannee River Water Management District (SRWMD) estimated population for 2014-2018 and developed population projections from 2020-2045 which will be used for upcoming water supply planning efforts. Estimating an accurate population for the SRWMD is important for planning purposes because it forms the foundation of estimating and projecting water use for different categories within each county. This technical memorandum provides information on the data sources used, methodology and results of the population estimation process.

Data

This section explains the data that were used to estimate population, where the data came from, and how or why data were used.

Bureau of Economic and Business Research (BEBR)

BEBR publishes estimates of population and persons per household in Florida on a county-wide basis. These data are updated and published annually. They also publish population projections by county on a 25-year planning horizon. The SRWMD uses the annual and projected populations (medium series) to estimate population. Additional data sources described below are used to estimate residential populations within the county as well as prepare estimates of residential population on public supply versus self-supply.

Public Supply Utility Data

The SRWMD sent out a public supply (PS) data request in October 2019 to utilities inquiring about estimated population served by the utility, annual water use by category (residential, commercial, institutional, other), water connections by category, per capita rates (if known), and any additional information related to public supply service area boundaries (PSAB) and/or water lines. These data were used to estimate the 2018 residential population being served by the utility's water system and to calculate gross and residential per capita rates.

Public Supply Service Area Boundary (PSAB)

The SRWMD used the existing PSAB data collected for the 2017 North Florida Regional Water Supply Partnership (NFRWSP) Plan and made updates to the boundaries based on information provided by utilities. These data are in a shapefile format and show the extent of public supply service areas. The boundaries are used to estimate the potential served population. The potential served population is estimated to evaluate the maximum number of people that could be served by the utility using parcel data and published estimates of persons per household. This estimate is used to project population growth within the county.

Parcel Layer

The parcel layer data originates from each individual county property appraiser and is sent to the Florida Department of Revenue (FDOR) once a year. The SRWMD's contractors, Quantum Spatial and Panda Consultants, gather the data from the FDOR, compile it, and deliver it back to the SRWMD. Later in the year, they make updates from data received from each property appraiser. All water

management districts (districts) individually contract with Quantum Spatial who uses Panda Consultants to process the data. All districts use the same specifications to ensure a consistent and complete dataset. The SRWMD used these data to estimate population served where utility data was not available, to estimate population distribution within counties served by two districts, and to calculate the potential served population inside of a PSAB.

Methodology

This section describes the methods used for estimating split counties, or counties that are shared with adjacent water management districts, as well as estimating served, non-served, institutional, and projected population.

Total County-wide Population

The BEBR county-wide population estimates, without institutional population, for 2014-2018 were used for the estimation of the total residential population (BEBR 2014, 2015, 2016, 2017, 2018). For split counties in the Western Region, a percent share was used to calculate the total population residing in the SRWMD's portion of the county.

Split Counties

The SRWMD shares five counties with adjacent districts. These counties are Alachua, Baker, Bradford, Jefferson, and Levy counties. For counties in the NFRWSP area, population estimates and projections for Alachua, Baker, and Bradford counties were developed in coordination with the St. Johns River Water Management District (SJRWMD). The total county-wide population estimates came from BEBR. The population model created by the SJRWMD was applied to estimate the population in the SJRWMD portion of NFRWSP counties for 2014-2018. The remainder of the population was assumed to be residing in the SRWMD's portion of shared counties.

For counties that are not located in the NFRWSP area, the SRWMD used the parcel layer to calculate the percent of dwelling units located in the SRWMD's portion of the counties. These counties include Jefferson and Levy counties. The percent share was calculated by taking the number of dwelling units in the SRWMD's portion of the county, dividing it by the total number of dwelling units in the county, and multiplying it by 100. For SRWMD planning efforts, this percent share was calculated annually for 2014-2018 to consider any shifts in dwelling units.

Public Supply and Small Public Supply (Served Population)

The served population is defined as the number of people receiving their water use from a public supply utility. The served population for 2018 was provided by many utilities from the public supply utility data request. For utilities that did not have an estimate of their served population, the SRWMD estimated the population by using the number of residential connections reported by the utility in the 2018 data request and multiplied them by BEBR's estimated persons per household for the corresponding county in which the public supply utility was located.

The potential served population was calculated to estimate the number of people served by a public supply utility from 2014-2017. The potential served population was estimated to evaluate the maximum number of people that could be served by the utility using parcel data and published estimates of persons per household. To calculate the potential served population, the number of residential dwelling units in a PSAB was multiplied by BEBR's estimated persons per household for the corresponding county and year. The percent change of potential served from one year to the next was used to estimate the served population from 2014-2017. To calculate the served population, the potential served population estimates for a given year were divided by the 2018 potential served

population and multiplied by the 2018 utility reported population. Below shows an example of the formula used to calculate the served population for 2017.

$$2017 \text{ served population} = \frac{2017 \text{ potential served}}{2018 \text{ potential served}} \times 2018 \text{ utility reported population}$$

There are two utilities for which additional data was used to estimate the served population. First, the City of Lake City provided additional data on residential connections that was used to calculate the served population for 2015-2018. The number of residential connections was multiplied by an estimate of 2.5 persons per household.

The second utility that provided additional information was Jefferson Communities Water System (JCWS). JCWS has two different systems located in the SRWMD; the Lloyd system which is split between the SRWMD and the Northwest Florida Water Management District (NFWFMD), and the Lamont system which is wholly encompassed in the SRWMD. To estimate the served population for Lloyd portion of JCWS, the SRWMD calculated the percent of parcels in the PSAB that fell within the SRWMD boundary. The 2018 served population was then multiplied by this percent to estimate the 2018 population served in the SRWMD's portion of the Lloyd system. The formula above was then used to estimate the served population for 2014-2017. JCWS provided estimates of population served for the Lamont system.

Population estimates for the SRWMD's portion of Gainesville Regional Utilities (GRU), Clay County Utility Authority, and Melrose Water Association were provided by the SJRWMD. These estimates were incorporated into the served population estimates for Alachua and Bradford counties and used to more accurately estimate the non-served population.

For small public supply permits that did not have a PSAB (i.e., mobile home parks), the served population was estimated based on the information provided in the permit. This estimate of population was held constant for current and projected years (2014-2018, 2020-2045).

Domestic Self Supply (Non-served Population)

The non-served population is defined as the number of people getting their water use from their own domestic self-supply well. This population was estimated by taking the total BEBR county-wide population estimate, less institutional population, and subtracting the served population.

Institutional Population

Correctional facilities and prisons located in the SRWMD are either connected to a public supply utility or are self-supplied and have an institutional water use permit that is required to report use. This institutional use is therefore already being accounted for in the water use estimates for either the public supply (PS) or commercial/industrial/institutional category (CII). Accounting for the institutional population separately enables the SRWMD to more accurately estimate the non-served population and the water use associated with the DSS category. The SRWMD used the 2014-2018 BEBR published inmate population estimates to determine the institutional population by county. To be consistent with BEBR Volume 53, Bulletin 186, which was used for projections, the 2019 institutional population was used as the projected population and held constant through the 2020-2045 planning period (Rayer, S. and Y. Wang. 2020).

Projections

County population projection estimates published by BEBR in January 2020 were used for estimating population from 2020-2045 (Rayer, S. and Y. Wang. 2020). The percent split calculated for 2018 was used to estimate the future populations of shared counties in the Western Region. In the NFRWSP, the county population estimated for the SRWMD is the difference between the BEBR estimate and the SJRWMD projected estimate for each projected year (2020, 2025, 2030, 2035, 2040, and 2045). Because BEBR's projection estimates include both residential and institutional population, the institutional population was subtracted out to be able to get an accurate estimate of the non-served residential population in the future. The institutional population was held constant through the projection period.

In some counties, the 2020 projected population was less than the estimated 2018 population, therefore there was a negative projection estimate due to the variability in the estimation of the institutional population. For counties with a negative projected population for 2020, the estimated total population was set equal to the 2018 total population and grown by the number of people BEBR projected for each time increment. Counties adjusted included Hamilton, Madison, and Union counties. Counties that had a positive 2020 projected residential population estimate were grown by the BEBR reported population projections, less the estimate of institutional population.

The SRWMD applied the population model created by the SJRWMD to distribute projected future population within the county (SJRWMD. 2021). This model also estimated the projected future served populations within PSABs. The projected future served population estimates were subtracted from the county-wide residential projections to get an estimate of the non-served projected population.

Stakeholder Outreach

The SRWMD summarized each utility's population and water use estimates and projections. We reached out to individual utilities to discuss the data and further refine our estimates. We made updates to the served population estimates for 2014-2018 for utilities that provided comments. If documentation was provided to substantiate higher growth estimates than the model predicted, then estimates were updated. For example, the City of Newberry provided the SRWMD with a citywide Equivalent Residential Unit (ERU) water use study with estimates and projections for their utility to substantiate a different growth rate.

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