

# 2022 Estimated Water Use

*in the*

Northwest Florida Water Management District

# SUMMARY REPORT



March 2025

TRS-22-1



# Background and Methods

Pursuant to Florida Statutes,<sup>1</sup> quantifying existing legal uses of water or estimating water use is foundational data for Northwest Florida Water Management District (NFWWMD or District) water supply assessments, regional water supply plans, groundwater flow and transport models, Minimum Flows and Minimum Water Levels (MFLs) technical assessments, and consumptive use permitting. Existing water use is the baseline data to develop water demand projections and future reasonable-beneficial water use needs.

As noted in rule (62-40.540(6), F.A.C.), “*The Districts shall implement a strategy for measuring, estimating, and reporting withdrawal and use of water by permitted and exempted users. ... The Districts are encouraged to summarize and analyze water use in the District at least annually.*” Also by rule (62-40.531, F.A.C.), water use estimates and projections are to be provided for the following use classes:

1. Public Supply,
2. Domestic Self-Supply (DSS),
3. Agricultural,
4. Recreational Irrigation (golf course, landscape),
5. Industrial-Commercial-Institutional (ICI), and
6. Thermolectric (Power Generation).

Estimates are based on best available data and primarily rely on audited pumpage reports from permittees with Individual Water Use Permits (IWUPs) that have an average daily rate equal to or greater than 0.1 million gallons per day (mgd) of permitted allocation, or that have permit conditions requiring annual water use reporting, for example, being within a Water Resource Caution Area or Area of Resource Concern. With numerous small towns and rural areas in NFWWMD, in an average year 30 percent of IWUPs are less than

<sup>1</sup> Sections 373.036 and 373.709, Florida Statutes (F.S.).

<sup>2</sup> Additional water use estimates include IWUPs and other small-scale recreational wells with General Water Use Permits (GWUPs) with no reporting requirements.

0.1 mgd. Estimates include water withdrawals from six different aquifer systems and from surface water sources.

Public supply data include estimates of water production, transfers, and demand; as well as estimates of populations served and per capita water use rates. Domestic self-supply is estimated based on population and a per capita use rate. Agricultural water use is reported, but the total estimate is based on the Florida Department of Agriculture and Consumer Services (FDACS) Florida Statewide Agricultural Irrigation Demand (FSAID) estimates. Recreational irrigation estimates are a combination of reported pumpage and additional estimated use.<sup>2</sup> Industrial-commercial-institutional (ICI) and power generation water use are estimated from reported pumpage and adjusted for non-consumptive returns. Power and ICI water that is withdrawn for cooling purposes and returned to the source is not, for planning or estimating purposes, considered consumptive use.

Public supply reported pumpage and other supporting data include, by default, seasonal water use. Seasonal residents, which include migrant workers, are estimated to affect public supply and DSS water use in all sixteen counties. Therefore, population estimates for public supply, DSS, and by county include seasonal resident adjustments.

This report summarizes the District’s reported and estimated water use in calendar year 2022. An overview of District land use and water supply planning regions is illustrated in **Error! Reference source not found.** below:

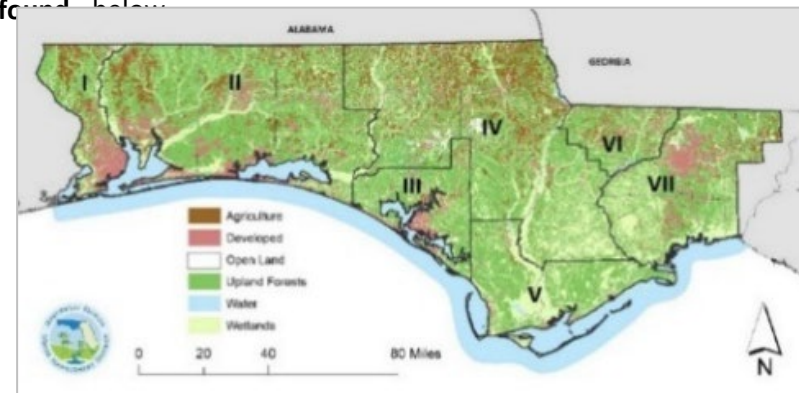


Figure 1. NFWWMD Land Use and Planning Regions (I - VII)

# 2022 Water Use Summary

As illustrated in **Error! Reference source not found.**, the District’s 16 counties are organized into seven water supply planning regions:

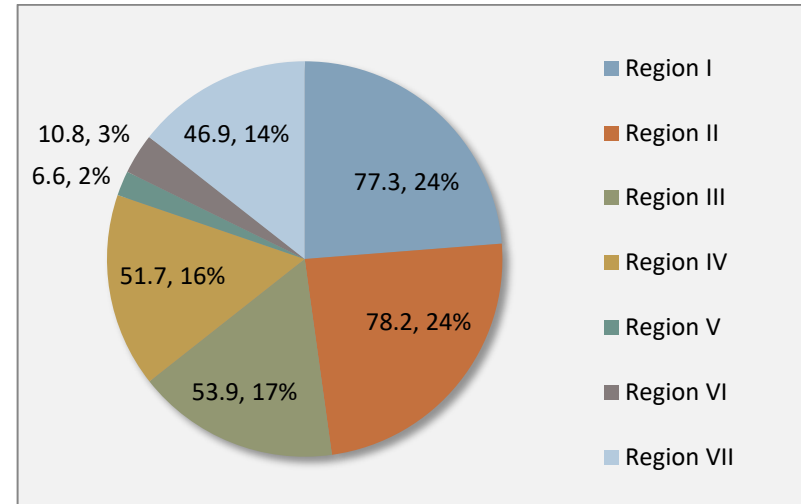
- I. Escambia County
- II. Okaloosa, Santa Rosa, and Walton counties
- III. Bay County
- IV. Calhoun, Holmes, Jackson, Liberty, and Washington counties
- V. Franklin and Gulf counties
- VI. Gadsden County
- VII. Leon, Wakulla, and (NFWMD portion of) Jefferson counties

District water use in 2022 totaled more than 325 mgd and is summarized by region and water use category in Table 1 and Figure 2.

Region II accounted for 24 percent of all District estimated water use in 2022, at 78.22 mgd. Region I was the second largest user with over 78.31 mgd, just under 24 percent. Bay County (Region III) was the third largest in water use, followed by regions IV and VII.

**Table 1. Estimated Water Use by Category and by Region (mgd)**

Planning Region	Public Supply	Domestic Self-Supply	Agriculture	Recreation	ICI	Power Generation	TOTAL WATER USE (mgd)
Region I	40.05	2.02	3.09	2.25	24.16	5.73	77.31
Region II	55.87	2.95	3.33	10.79	5.28	0.00	78.22
Region III	29.86	2.45	0.88	2.17	18.23	0.33	53.93
Region IV	5.78	6.49	36.62	0.89	1.61	0.28	51.66
Region V	5.25	0.49	0.30	0.28	0.26	-	6.59
Region VI	4.05	1.15	4.93	0.18	0.47	-	10.78
Region VII	33.18	4.58	1.60	3.65	1.18	2.71	46.91
<b>Totals</b>	<b>174.04</b>	<b>20.13</b>	<b>50.76</b>	<b>20.21</b>	<b>51.20</b>	<b>9.05</b>	<b>325.39</b>



**Figure 2. Estimated Water Use by Planning Region (mgd)**

In 2022, public supply accounted for more than half of all Districtwide water use (174.04 mgd), followed by ICI at 51.20 mgd, and then agriculture (50.76 mgd). Recreation, DSS, and power generation use range from three to six percent of total water use (Table 1 and Figure

4). Public supply has consistently been the largest water use category Districtwide since 1995 (see Appendix, page A.20). Public supply water use is concentrated in urbanized portions of regions I, II, III, and VII (Table 1 and Figure 2). Region IV, predominately rural and agricultural, had 32 percent of all DSS and 72 percent of all agricultural water use. Region II had 53 percent of all recreational water use. Region I had 47 percent of all industrial-commercial-institutional (ICI) self-supplied water use. Region I accounted for 63% of water use for power generation with Region VII accounting for just under 30% of use.

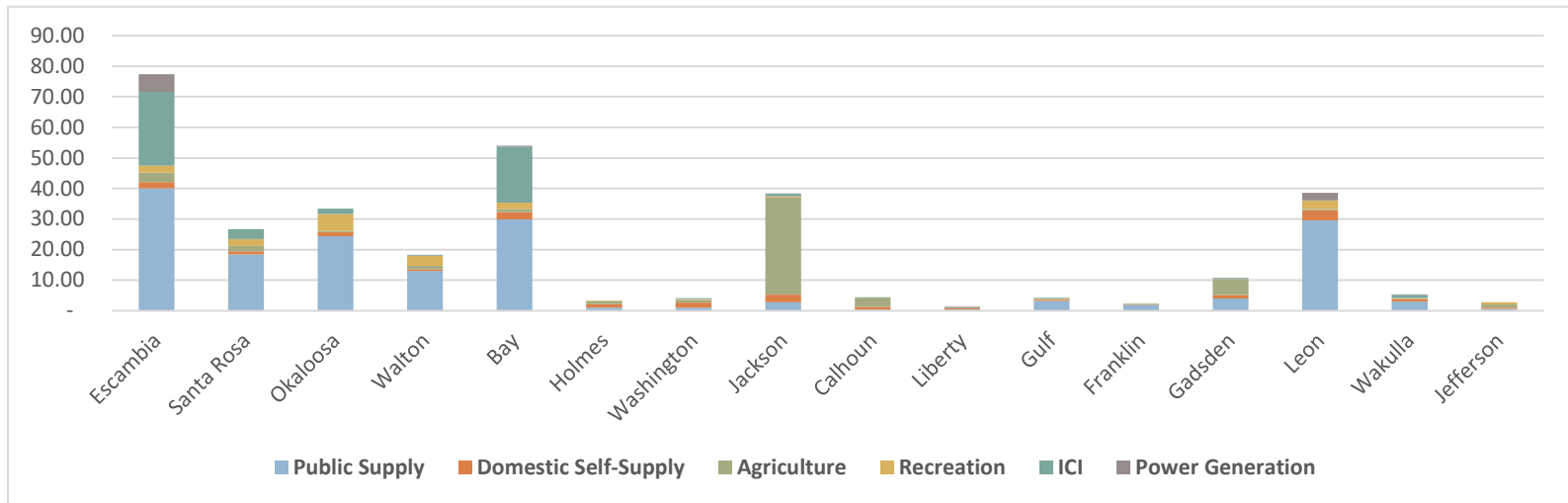


Figure 3. Total Water Use by County and Water Use Category (mgd)

### Population Estimates

The University of Florida, Bureau of Business and Economic Research (BEER), estimated 2022 District permanent population to be 1,538,394 (Table 2).

Table 2. Population Estimates

REGION	BEER Permanent Populations	Seasonal Adjustments	TOTAL <sup>2</sup> Population Estimates
Region I	329,583	10,547	340,130
Region II	492,129	62,331	554,460
Region III	184,002	22,080	206,082
Region IV	115,211	3,531	118,742
Region V	28,667	8,471	37,138
Region VI	43,967	1,055	45,022
Region VII <sup>1</sup>	344,835	3,623	348,458
<b>TOTALS</b>	<b>1,538,394</b>	<b>111,637</b>	<b>1,650,031</b>

<sup>1</sup> Estimated NFWFMD share of Jefferson County only.

<sup>2</sup> Total population estimates, including seasonal adjustments.

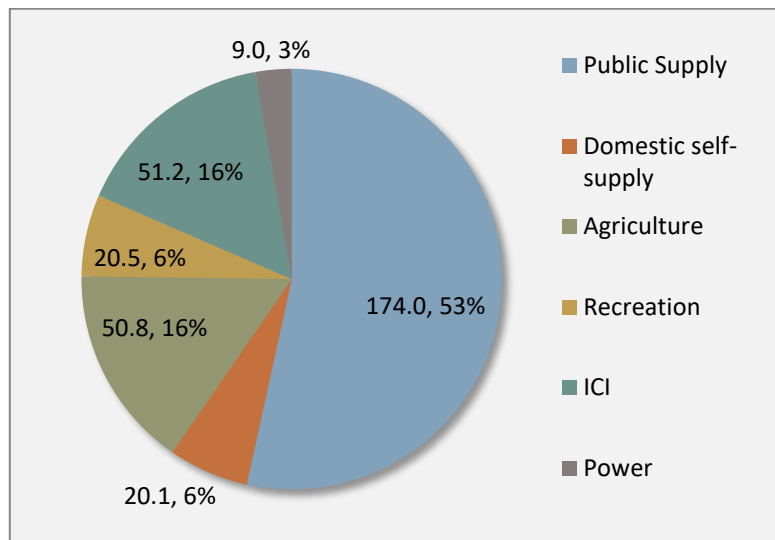


Figure 4. Total Water Use by Category (mgd)

The effects of seasonality were estimated to add an equivalent of 111,637 residents for a total adjusted population estimate of 1,650,031. Approximately 86 percent of District residents are estimated to be served by public supply utilities.

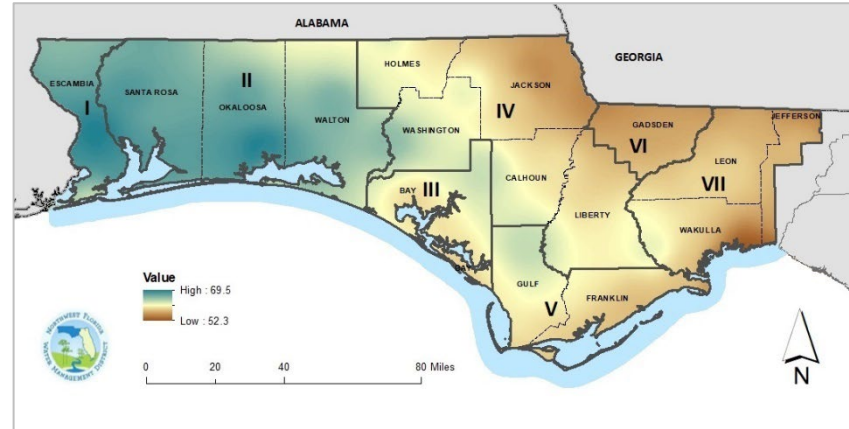
The 2022 BEBR Districtwide population estimate is 28,064 more than 2021, following trends exhibited before the slight decrease in the 2019 estimate.

**Table 3. BEBR Population Estimates 2021-2022**

	BEBR Population Estimates		2021-2022 Change	
	2022	2021	Population	Percent
Escambia	329,583	324,458	5,125	1.6%
Okaloosa	215,751	213,204	2,547	1.2%
Santa Rosa	196,834	191,911	4,923	2.6%
Walton	79,544	77,941	1,603	2.1%
Bay	184,002	178,282	5,720	3.2%
Calhoun	13,740	13,683	57	0.4%
Holmes	19,784	19,665	119	0.6%
Jackson	48,395	47,198	1,197	2.5%
Liberty	7,831	7,464	367	4.9%
Washington	25,461	24,995	466	1.9%
Franklin	12,729	12,364	365	3.0%
Gulf	15,938	14,824	1,114	7.5%
Gadsden	43,967	43,813	154	0.4%
Jefferson <sup>(NWF Only)</sup>	10,536	10,296	240	2.3%
Leon	299,130	295,921	3,209	1.1%
Wakulla	35,169	34,311	858	2.5%
<b>TOTALS</b>	<b>1,538,394</b>	<b>1,510,330</b>	<b>28,064</b>	<b>1.9%</b>

## Rainfall and Drought

Precipitation varies regionally with more rain naturally occurring in the western panhandle and lower rainfall levels typical in northeastern parts of the District (Figure 5). The 2022 annual average rainfall Districtwide at nearly 61.06 inches was slightly below the 30-year normal annual average of 62.2 inches (Figure 85).



**Figure 5. Normal Average Annual Precipitation (1991-2020) In/Yr<sup>3</sup>**

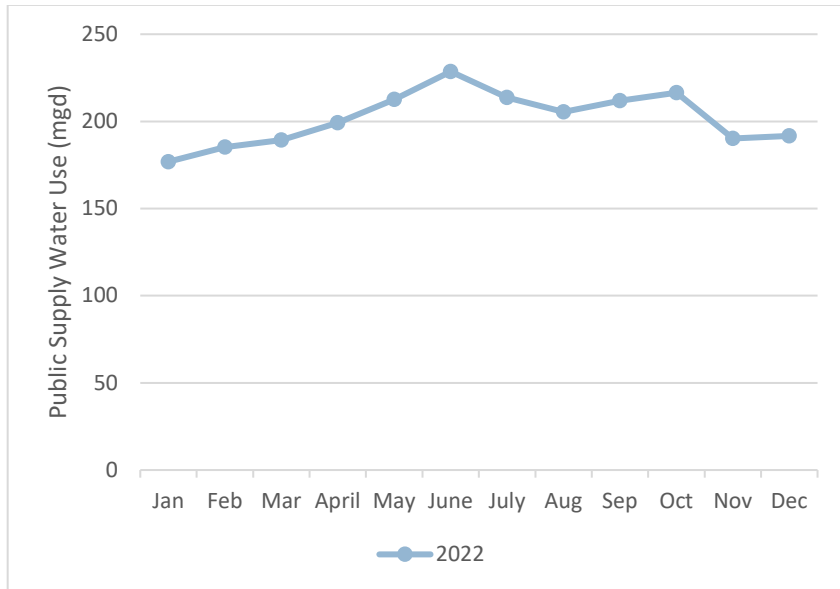
Agriculture and recreation are the two water use categories most affected by rainfall and drought. More precipitation information is in the Agricultural and Recreational Irrigation section.

Water use in Public Supply and Domestic Self-Supply typically increases by an estimated seven percent in dry years (NFWFMD, 2018). Power Generation and ICI drought year demands are not anticipated to differ from water demands during an average rainfall year.

<sup>3</sup> Source: PRISM Climate Group, Oregon State University, <http://prism.oregonstate.edu>. Data created Jan 10, 2023.

# Public Supply and Domestic Self-Supply

Public supply water use in 2022 was estimated to be 174 mgd, more than half of all water use Districtwide. With seasonal adjustments, estimated public supply populations served totaled 1.47 million. Approximately 57 percent of all public supply water use was in the District’s three most urbanized counties: Escambia, Bay, and Leon; and 91 percent was in regions I, II, III and VII combined.



**Figure 6. Monthly Average Public Supply Water Use (mgd)**

Districtwide monthly average public supply water use during 2022 is illustrated in Figure 6. and may vary spatially. The lowest water use generally occurs during winter months. Higher water consumption

<sup>4</sup> Gallons per capita per day (gpcd).

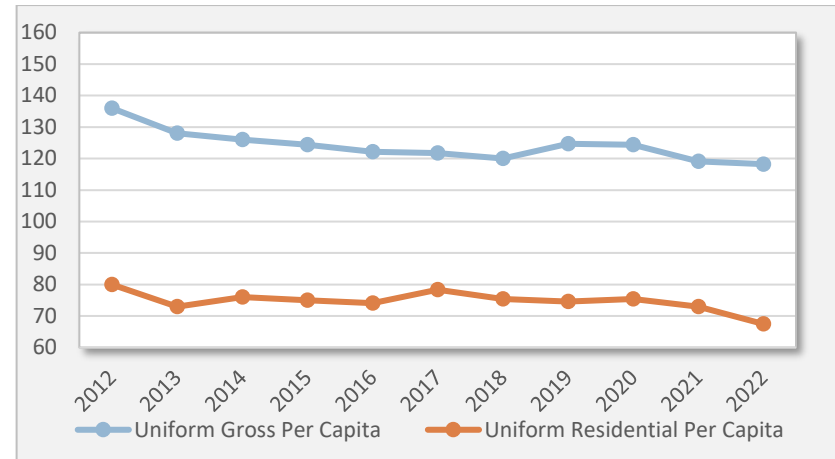
from May through October is likely due to landscape irrigation needs or the impacts from seasonal residents in some communities, or both.

The estimated 2022 DSS population was 236,808. Based on a domestic per capita water use rate of 85.0 gpcd<sup>4</sup> (USGS, 2020), the estimated domestic self-supply (DSS) water use was approximately 20.1 mgd.

Together, public supply and DSS comprised 60 percent of all water use Districtwide in 2022.

## Per Capita Water Use Rates

The 2022 Districtwide public supply per capita water use rates were 118 gpcd gross and 67.5 gpcd residential. Gross per capita rates exhibit a downward trend that plateaued and residential rates recently declined (Figure 7). See Appendix, page A.19, for more information.



**Figure 7. Trends in Per Capita Water Use Rates 2012-2022 (gpcd)**

Five-year average per capita rates over the period 2018-2022 are:

- Average Uniform Gross Per Capita: 121.3 gpcd
- Average Uniform Residential Per Capita: 73.2 gpcd

# Agricultural and Recreational Irrigation

The Districtwide annual average rainfall in 2022 was below average (Figure 8). From 2011 to 2022, data appears to indicate an inverse relationship between total estimated and reported agricultural water use and annual average precipitation though this is dependent on the time of year that precipitation occurs.

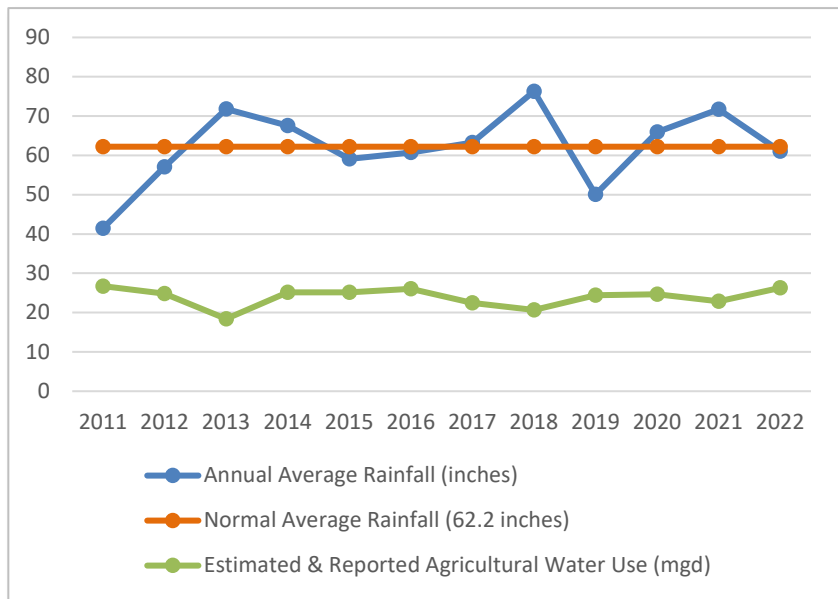


Figure 8. Rainfall and Agricultural Reported Water Use 2011-2022

The estimated and reported agricultural water use in 2022 was 26.3 mgd, approximately 52 percent of the most recent FSAID total agricultural estimate of 50.8 mgd (2022 data). Approximately 93 percent of reported agricultural water withdrawals are from groundwater and 90 percent of the reported surface water withdrawals were in Gadsden County.

Monthly average reported agricultural water use during calendar years 2020, 2021, and 2022 is illustrated in Figure 9.

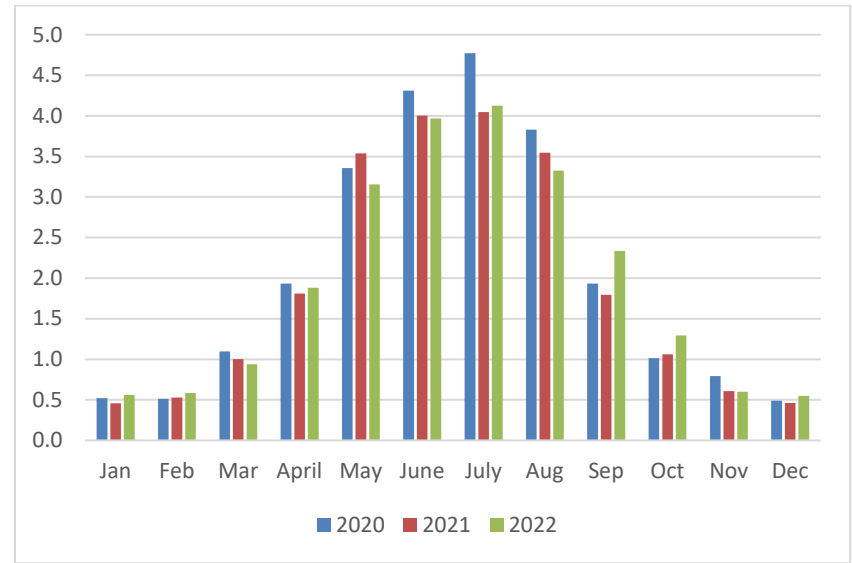


Figure 9. Reported Agricultural Water Use by Month (mgd)

Recreational water uses include golf course and landscape irrigation, and water-based recreation. About 71 percent of small-scale irrigation General Water Use Permit (GWUP) wells in NFWMD are estimated to be located in Region II. Also, Region II had 54 percent of the reported and 53 percent of the total estimated recreational water use Districtwide.

The total estimated recreational water use in 2022 was 20.21 mgd. Reported recreational water use was 11.14 mgd or 55 percent of the total. The sources of reported recreational water use are approximately 63 percent groundwater and 37 percent surface water. Other sources of water may include reuse of reclaimed water or comingling of surface, ground, and reuse waters, which were not analyzed at the time of this report.

Collectively, agricultural and recreational irrigation were estimated to comprise about 22 percent of all water use Districtwide in 2022.



## Power Generation and ICI

Thermoelectric power generation and ICI self-supplied water use estimates in 2022, adjusted for recirculation, were approximately 9.05 mgd and 51.2 mgd respectively. Power generation and ICI together accounted for 19 percent of all 2022 water use Districtwide.

Approximately 83 percent of ICI self-supply water use occurred in Escambia and Bay counties, 10 percent in Region II, and 7 percent in the remaining District counties. Additional ICI water users are served by public supply utilities. Of the total ICI self-supplied water use, 64 percent was groundwater and 36 percent surface water.

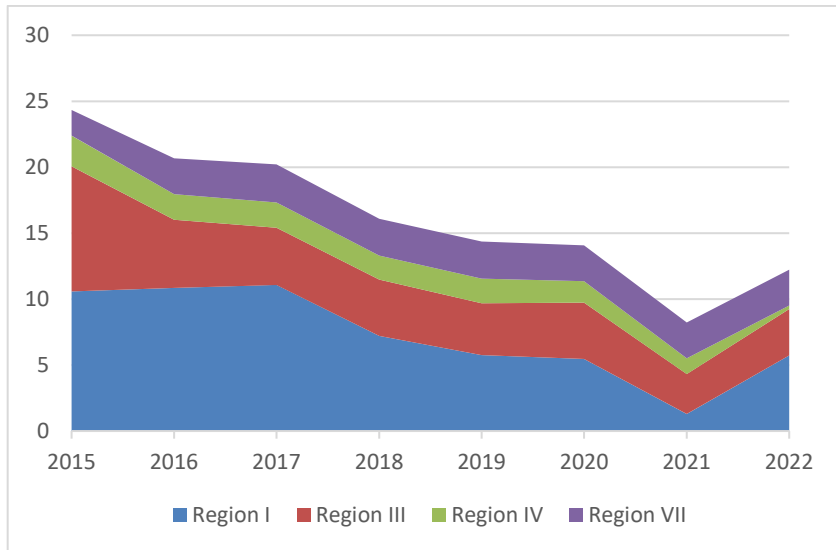


Figure 10. Trends in Power Water Use 2015-2022 (mgd)

Figure 10 illustrates total power generation water use from 2015 to 2022 in regions that have thermoelectric power generation facilities. Factors contributing to declining water use trends may include conservation, system efficiencies, and fuel conversions. However, a slight increase back toward 2020 water use occurred in 2022.

## Water Withdrawals by Water Source

Primary groundwater resources are the Floridan aquifer across much of northwest Florida and the sand-and-gravel aquifer in western parts of the District. The major surface water resource is Deer Point Lake Reservoir in Bay County.

Approximately 65 percent of water withdrawals in 2022 were from groundwater, 19 percent from surface waters, and 16 percent “Other Water” – which are unknown or uncertain sources of water attributed to DSS and to additional agricultural and recreational water use estimates (Figure 11). Withdrawals from the Floridan aquifer accounted for an estimated 37 percent of all water use and more than half of all groundwater withdrawals. Approximately 42 percent of groundwater withdrawals were from the sand-and-gravel aquifer. Less than one percent of groundwater pumped was from other aquifers, including the intermediate, Claiborne, and surficial aquifer systems.

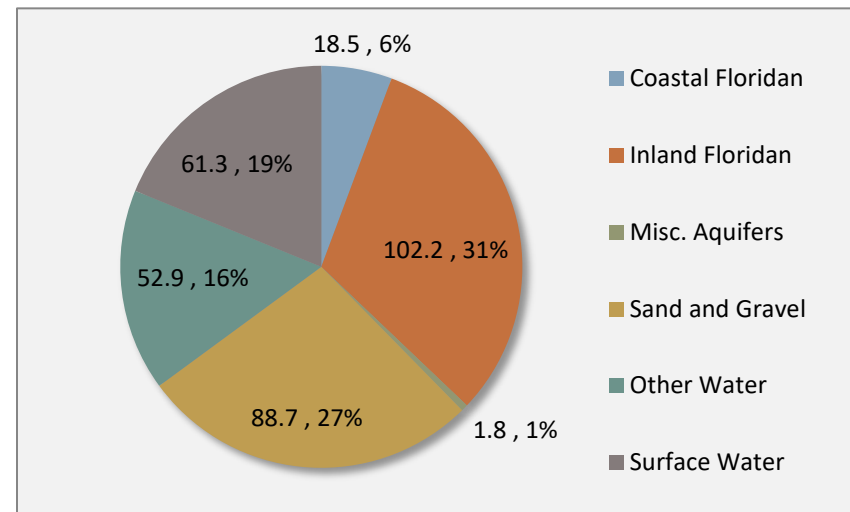


Figure 31. NFWMD 2022 Water Use by Source

# Data Quality and Uncertainty Analysis

In 2022, 76 percent (245 mgd) of all estimated water use was obtained from reported and audited compliance data submitted by permittees that have an Individual Water Use Permit (IWUP). Public Supply and ICI estimates are obtained from reported and audited pumping reports. All or a portion of the remaining water use estimates are estimated, as follows:

- Domestic Self-Supply (DSS) – One hundred percent estimated based on the population not served by public supply utilities and a domestic per capita water use rate provided by the USGS.
- Agriculture – 52 percent of the total FDACS/FSAID<sup>5</sup> estimate is NFWFMD reported data and audited pumping reports.
- Recreation – 56 percent of the recreational estimate was obtained from audited pumping reports. The total includes water use estimated from small-scale irrigation wells.
- Power – Some power generating facilities with DEP Site Certifications do not have an IWUP or have limited IWUP compliance reporting conditions. Thus, these facilities make up nearly 3.0 mgd of uncertainty.

Changes in regulatory criteria, type and frequency of compliance reports submitted by permittees, and changes in the number of permittees with reporting requirements can all affect the availability and quality of water use and population data.

The District continues refining data and methods to enhance population estimates for public supply and DSS, including how to

<sup>5</sup> The FDACS/FSAID agriculture estimates are typically completed by June following water management district annual estimates, in this case, FSAID XI released in June

account for ICI institutional residents and limited public supply populations in overall population analyses.

Inmate populations are included in BEBR estimates. In 2022, BEBR estimated that NFWFMD had close to two percent of the total state population and 35 percent of Florida’s inmate population. Share of inmate populations by county are provided in Table 4.

Correctional facility IWUPs often provide water for multiple use categories (e.g., agriculture, heating and cooling, landscape irrigation) and may still be separately dependent on a public supply utility for potable water supplies.

**Table 4. BEBR 2022 Total and Inmate Population Estimates**

COUNTY	Total BEBR Estimate	Inmates Estimate	Net Total (less inmates)	Inmates as a % of Total BEBR	Inmates % of Net Total
ESCAMBIA	329,583	1,871	327,712	0.57%	0.57%
OKALOOSA	215,751	1,416	214,335	0.66%	0.66%
SANTA ROSA	196,834	8,834	188,000	4.49%	4.70%
WALTON	79,544	2,442	77,102	3.07%	3.17%
BAY	184,002	1,139	182,863	0.62%	0.62%
CALHOUN	13,740	1,296	12,444	9.43%	10.41%
HOLMES	19,784	1,246	18,538	6.30%	6.72%
JACKSON	48,395	5,804	42,591	11.99%	13.63%
LIBERTY	7,831	1,410	6,421	18.01%	21.96%
WASHINGTON	25,461	1,646	23,815	6.46%	6.91%
FRANKLIN	12,729	957	11,772	7.52%	8.13%
GULF	15,938	1,669	14,269	10.47%	11.70%
GADSDEN	43,967	2,740	41,227	6.23%	6.65%
JEFFERSON <sup>(NWF)</sup>	10,536	0	10,536	0.00%	0.00%
LEON	299,130	1,159	297,971	0.39%	0.39%
WAKULLA	35,169	2,442	32,727	6.94%	7.46%
<b>TOTALS</b>	<b>1,538,394</b>	<b>36,071</b>	<b>1,502,323</b>	<b>2.34%</b>	<b>2.40%</b>

2024 was prepared with 2022 water use data. The water demand estimates are modeled based on average hypothetical rainfall.

## Acronyms

---

BEBR	Bureau of Business and Economic Research
DSS	Domestic Self-Supply
F.A.C.	Florida Administrative Code
FDACS	Florida Department of Agriculture and Consumer Services
F.S.	Florida Statutes
FSAID	Florida Statewide Agricultural Irrigation Demand
gpcd	Gallons per Capita per Day
GWUP	General Water Use Permit
ICI	Industrial-Commercial-Institutional
IWUP	Individual Water Use Permit
mgd	Million Gallons per Day
MFLs	Minimum Flows and Minimum Water Levels
USGS	United States Geological Survey

## References and Additional Information

---

- Bureau of Business and Economic Research (BEBR). 2022. *Florida Estimates of Population 2022*. University of Florida, College of Liberal Arts and Sciences, Population Studies Program. <https://www.bebr.ufl.edu/population>
- Florida Department of Agriculture and Consumer Services (FDACS) and The Balmoral Group (TBG). June 30, 2022. *Florida Statewide Agricultural Irrigation Demand 2020-2045 Agricultural Water Demands* (FSAID IX). <https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Water-Supply-Planning>
- Northwest Florida Water Management District (NFWFMD). December 2018. *2018 Water Supply Assessment Update*. WRA 18-01. <https://www.nfwwater.com/Water-Resources/Water-Supply-Planning/Water-Supply-Assessments>.
- U.S. Geological Survey (USGS). 2020. *Water Withdrawals, Use, and Trends in Florida, 2015*. Data supplied by Mr. Rich Marella, USGS Florida Water Science Center, Orlando, Florida., <https://doi.org/10.3133/sir20195147>

## APPENDIX CONTENTS

Page(s)

### Districtwide Water Use and Population Estimates:

Total Estimated Water Use by Category (mgd).....	A.01
Total Estimated Water Withdrawals by Source (mgd).....	A.02
Population Estimates - County, Public Supply Utility, and Domestic Self-Supply.....	A.03

### Summary Data Tables by Water Use Category:

#### **1. Public Supply**

1.1 Public Supply Water Demand, Populations Served, and Per Capita Water Use.....	A.04
1.2 Public Supply Water Withdrawals by Source (mgd).....	A.05
1.3 Public Supply Water Demand, Populations Served, and Per Capita Water Use - by Utility.....	A.06 – A.10

#### **2. Domestic Self-Supply**

2.1 Domestic Self-Supply Population and Water Use Estimates (mgd).....	A.11
2.2 Domestic Self-Supply Population Estimates Over Time.....	A.12

#### **3. Agriculture**

3.1 Agricultural Water Use - Reported and Total Estimates (mgd).....	A.13
3.2 Agricultural Reported Water Use by Source (mgd).....	A.14

#### **4. Recreational Irrigation**

4.1 Recreational Irrigation Water Use - Reported and Total Estimates (mgd).....	A.15
4.2 Recreational Irrigation Reported Water Use by Source (mgd).....	A.16

#### **5. Industrial-Commercial-Institutional**

5.1 Industrial-Commercial-Institutional Reported Water Use by Source (mgd).....	A.17
---	------

#### **6. Thermoelectric Power Generation**

6.1 Thermoelectric Power Generation Reported Water Use by Source (mgd).....	A.18
---	------

### Water Use Trends:

Public Supply Per Capita Water Use Over Time (gpcd).....	A.19
Trends in Share of and Total Water Use Estimates by Water Use Category (mgd).....	A.20



Northwest Florida Water Management District  
81 Water Management Drive  
Havana, Florida 32333-4712

(850) 539-5999

[www.nfwwater.com](http://www.nfwwater.com)

## Total Estimated Water Use by Category (mgd)

Planning Region	County / Region	Public Supply	Domestic Self-Supply	Agriculture <sup>(1)</sup>	Recreation <sup>(2)</sup>	ICI	Power Generation	TOTAL ESTIMATED WATER USE (mgd)
I	Escambia	40.055	2.023	3.093	2.251	24.157	5.731	77.311
	<b>Region I Total</b>	<b>40.055</b>	<b>2.023</b>	<b>3.093</b>	<b>2.251</b>	<b>24.157</b>	<b>5.731</b>	<b>77.311</b>
II	Okaloosa	24.398	1.351	0.473	5.393	1.753	-	33.368
	Santa Rosa	18.403	1.068	1.788	2.116	3.216	-	26.591
	Walton	13.072	0.526	1.071	3.277	0.315	-	18.261
	<b>Region II Total</b>	<b>55.873</b>	<b>2.945</b>	<b>3.332</b>	<b>10.786</b>	<b>5.284</b>	<b>-</b>	<b>78.220</b>
III	Bay	29.864	2.451	0.880	2.167	18.231	0.335	53.927
	<b>Region III Total</b>	<b>29.864</b>	<b>2.451</b>	<b>0.880</b>	<b>2.167</b>	<b>18.231</b>	<b>0.335</b>	<b>53.927</b>
IV	Calhoun	0.358	0.887	2.981	0.006	0.209	-	4.440
	Holmes	1.068	1.165	0.904	0.215	-	-	3.352
	Jackson	2.846	2.443	31.740	0.387	0.852	0.070	38.338
	Liberty	0.471	0.355	0.106	0.002	0.270	0.206	1.409
	Washington	1.032	1.639	0.886	0.282	0.280	-	4.118
	<b>Region IV Total</b>	<b>5.775</b>	<b>6.488</b>	<b>36.617</b>	<b>0.891</b>	<b>1.610</b>	<b>0.276</b>	<b>51.657</b>
V	Franklin	2.014	0.105	0.010	0.171	0.017	-	2.318
	Gulf	3.236	0.381	0.295	0.111	0.246	-	4.269
	<b>Region V Total</b>	<b>5.250</b>	<b>0.487</b>	<b>0.305</b>	<b>0.282</b>	<b>0.263</b>	<b>-</b>	<b>6.587</b>
VI	Gadsden	4.046	1.150	4.932	0.180	0.473	-	10.781
	<b>Region VI Total</b>	<b>4.046</b>	<b>1.150</b>	<b>4.932</b>	<b>0.180</b>	<b>0.473</b>	<b>-</b>	<b>10.781</b>
VII	Jefferson <sup>(NWF Only)</sup>	0.651	0.422	1.019	0.762	-	-	2.854
	Leon	29.557	3.304	0.465	2.682	0.105	2.500	38.614
	Wakulla	2.973	0.858	0.119	0.206	1.077	0.207	5.440
	<b>Region VII Total</b>	<b>33.181</b>	<b>4.584</b>	<b>1.603</b>	<b>3.650</b>	<b>1.182</b>	<b>2.707</b>	<b>46.908</b>
<b>TOTALS</b>		<b>174.044</b>	<b>20.129</b>	<b>50.761</b>	<b>20.207</b>	<b>51.201</b>	<b>9.049</b>	<b>325.390</b>
<b>Percent of Total Water Use:</b>		<b>53.5%</b>	<b>6.2%</b>	<b>15.6%</b>	<b>6.2%</b>	<b>15.7%</b>	<b>2.8%</b>	<b>100%</b>

Total annual average daily rate (ADR) estimated water use in million gallons per day (mgd).

(1) FSAID XI - 2022 estimated water use based on average hypothetical precipitation.

(2) Estimate of 2022 reported recreational water use and additional estimating methods and data used in the 2018 WSA.

## Total Estimated Water Use by Source (mgd)

Planning Region	County / Region	Coastal Floridan	Inland Floridan	Inter-mediate	Claiborne	Sand and Gravel	Surficial	Total Ground-water	Total Other Water <sup>(1)</sup>	Total Surface Water	TOTAL ESTIMATED WATER USE (mgd)
I	Escambia	-	-	-	-	64.731	0.161	64.892	6.157	6.261	77.311
	<b>Region Totals</b>	-	-	-	-	<b>64.731</b>	<b>0.161</b>	<b>64.892</b>	<b>6.157</b>	<b>6.261</b>	<b>77.311</b>
II	Okaloosa	13.315	9.271	-	-	1.624	-	24.209	3.595	2.002	29.806
	Santa Rosa	0.876	0.383	-	-	21.198	-	22.458	3.746	0.387	26.591
	Walton	1.608	15.723	0.095	-	1.173	0.186	18.785	2.200	0.838	21.823
	<b>Region Totals</b>	<b>15.799</b>	<b>25.377</b>	<b>0.095</b>	-	<b>23.995</b>	<b>0.186</b>	<b>65.452</b>	<b>9.542</b>	<b>3.227</b>	<b>78.220</b>
III	Bay	0.207	2.454	-	-	0.015	0.646	3.322	4.259	46.346	53.927
	<b>Region Totals</b>	<b>0.207</b>	<b>2.454</b>	-	-	<b>0.015</b>	<b>0.646</b>	<b>3.322</b>	<b>4.259</b>	<b>46.346</b>	<b>53.927</b>
IV	Calhoun	-	3.034	-	-	-	-	3.034	1.369	0.037	4.440
	Holmes	-	0.648	-	0.381	-	-	1.029	2.284	-	3.314
	Jackson	-	21.785	-	0.213	-	-	21.998	16.156	0.184	38.338
	Liberty	-	0.917	-	-	-	0.028	0.945	0.462	0.002	1.409
	Washington	-	1.675	-	-	-	-	1.675	2.465	0.016	4.156
	<b>Region Totals</b>	-	<b>28.060</b>	-	<b>0.594</b>	-	<b>0.028</b>	<b>28.682</b>	<b>22.736</b>	<b>0.238</b>	<b>51.657</b>
V	Franklin	2.032	-	-	-	-	-	2.032	0.176	0.111	2.318
	Gulf	0.467	0.664	0.023	-	-	0.023	1.178	0.531	2.560	4.269
	<b>Region Totals</b>	<b>2.499</b>	<b>0.664</b>	<b>0.023</b>	-	-	<b>0.023</b>	<b>3.210</b>	<b>0.706</b>	<b>2.671</b>	<b>6.587</b>
VI	Gadsden	-	6.134	-	-	-	-	6.134	2.998	1.649	10.781
	<b>Region Totals</b>	-	<b>6.134</b>	-	-	-	-	<b>6.134</b>	<b>2.998</b>	<b>1.649</b>	<b>10.781</b>
VII	Jefferson <sup>(NWF Only)</sup>	-	1.861	-	-	-	-	1.861	0.993	-	2.854
	Leon	-	34.189	-	-	-	-	34.189	4.302	0.668	39.160
	Wakulla	-	3.504	-	-	-	-	3.504	1.183	0.207	4.895
	<b>Region Totals</b>	-	<b>39.554</b>	-	-	-	-	<b>39.554</b>	<b>6.478</b>	<b>0.876</b>	<b>46.908</b>
<b>DISTRICT TOTALS</b>		<b>18.505</b>	<b>102.242</b>	<b>0.119</b>	<b>0.594</b>	<b>88.740</b>	<b>1.044</b>	<b>211.245</b>	<b>52.877</b>	<b>61.268</b>	<b>325.390</b>
<b>Percentages</b>		<b>8.8%</b>	<b>48.4%</b>	<b>0.1%</b>	<b>0.3%</b>	<b>42.0%</b>	<b>0.5%</b>	<b>64.9%</b>	<b>16.3%</b>	<b>18.8%</b>	<b>100%</b>

(1) "Other Water" refers to estimated withdrawals, but source is unknown or uncertain. Domestic Self-Supply (DSS) water use is estimated with population estimates and a per capita water use rate: groundwater withdrawn from domestic or limited public supply wells is assumed but no specific water source or aquifer is identified. Additional estimating methods for Agriculture and Recreational Irrigation also have uncertain water sources. Gadsden County agricultural water use is on average 50-50 surface and groundwater. Recreational water use is often a complex water flow system of both ground and surface waters and at times co-mingled with reclaimed water.

## Population Estimates - County, Public Supply Utility, and Domestic Self-Supply

Planning Region	County / Region	2010-2020 Population Change % <sup>(1)</sup>	BEER 2022 County Permanent Populations <sup>(2)</sup>	Seasonal Rate % County Average	County Seasonal <sup>(3)</sup> Adjustments	TOTAL <sup>(4)</sup> County Population Estimates	Public Supply Populations Served <sup>(5)</sup>	% of TOTAL	DSS-Other Population Estimates <sup>(6)</sup>	% of TOTAL
I	Escambia	10.7%	329,583	3.2%	10,547	340,130	316,328	93.0%	23,802	7.0%
	<b>Total/Average</b>	<b>10.7%</b>	<b>329,583</b>	<b>3.2%</b>	<b>10,547</b>	<b>340,130</b>	<b>316,328</b>	<b>93.0%</b>	<b>23,802</b>	<b>7.0%</b>
II	Okaloosa	19.3%	215,751	9.0%	19,418	235,169	219,270	93.2%	15,899	6.8%
	Santa Rosa	30.0%	196,834	2.0%	3,937	200,771	188,211	93.7%	12,559	6.3%
	Walton	44.5%	79,544	49.0%	38,977	118,521	112,331	94.8%	6,189	5.2%
	<b>Total/Average</b>	<b>27.1%</b>	<b>492,129</b>	<b>20.0%</b>	<b>62,331</b>	<b>554,459</b>	<b>519,813</b>	<b>93.8%</b>	<b>34,647</b>	<b>6.2%</b>
III	Bay	9.0%	184,002	12.0%	22,080	206,082	177,249	86.0%	28,834	14.0%
	<b>Total/Average</b>	<b>9.0%</b>	<b>184,002</b>	<b>12.0%</b>	<b>22,080</b>	<b>206,082</b>	<b>177,249</b>	<b>86.0%</b>	<b>28,834</b>	<b>14.0%</b>
IV	Calhoun	-6.1%	13,740	3.0%	412	14,152	3,722	26.3%	10,430	73.7%
	Holmes	-0.7%	19,784	1.0%	198	19,982	6,276	31.4%	13,706	68.6%
	Jackson	-2.7%	48,395	3.0%	1,452	49,847	21,111	42.4%	28,736	57.6%
	Liberty	-6.4%	7,831	9.0%	705	8,536	4,356	51.0%	4,180	49.0%
	Washington	2.3%	25,461	3.0%	764	26,225	6,946	26.5%	19,279	73.5%
	<b>Total/Average</b>	<b>-2.0%</b>	<b>115,211</b>	<b>3.8%</b>	<b>3,531</b>	<b>118,742</b>	<b>42,411</b>	<b>35.7%</b>	<b>76,331</b>	<b>64.3%</b>
V	Franklin	10.2%	12,729	39.0%	4,964	17,694	16,453	93.0%	1,241	7.0%
	Gulf	0.5%	15,938	22.0%	3,506	19,445	14,957	76.9%	4,488	23.1%
	<b>Total/Average</b>	<b>4.6%</b>	<b>28,667</b>	<b>30.5%</b>	<b>8,471</b>	<b>37,138</b>	<b>31,410</b>	<b>84.6%</b>	<b>5,729</b>	<b>15.4%</b>
VI	Gadsden	-5.2%	43,967	2.4%	1,055	45,022	31,489	69.9%	13,533	30.1%
	<b>Total/Average</b>	<b>-5.2%</b>	<b>43,967</b>	<b>2.4%</b>	<b>1,055</b>	<b>45,022</b>	<b>31,489</b>	<b>69.9%</b>	<b>13,533</b>	<b>30.1%</b>
VII	Jefferson <sup>(NWF Only)</sup>	1.1%	10,536	3.5%	369	10,905	5,935	54.4%	4,970	45.6%
	Leon	8.6%	299,130	0.5%	1,496	300,626	261,756	87.1%	38,869	12.9%
	Wakulla	14.3%	35,169	5.0%	1,758	36,928	26,833	72.7%	10,094	27.3%
	<b>Total/Average</b>	<b>8.9%</b>	<b>344,835</b>	<b>3.0%</b>	<b>3,623</b>	<b>348,458</b>	<b>294,525</b>	<b>84.5%</b>	<b>53,932</b>	<b>15.5%</b>
<b>TOTALS/AVERAGES</b>		<b>13.0%</b>	<b>1,538,394</b>	<b>7.3%</b>	<b>111,637</b>	<b>1,650,031</b>	<b>1,413,223</b>	<b>85.6%</b>	<b>236,808</b>	<b>14.4%</b>

- (1) Source: University of Florida (UF), Bureau of Economic and Business Research (BEER), Population Studies Program, <https://www.bebr.ufl.edu/population>.
- (2) UF BEER, Population Studies Program, Vol. 54, Bulletin 189, April 2022. Permanent population estimates only, but includes estimated inmate populations.
- (3) Estimated seasonal populations based on county average seasonal rates applied to BEBR population estimates.
- (4) Total county populations adjusted by adding the estimated seasonal populations to BEBR estimate.
- (5) The population served by each public supply utility service area is estimated from review of all available data, including compliance submissions, and include seasonal population estimates where applicable.
- (6) Net Domestic Self-Supply (DSS) population estimates are derived by subtracting public supply utility populations served from adjusted county totals. This estimate includes other miscellaneous populations, e.g., small public systems and correctional facility inmates not otherwise accounted for.



## 1.1 Public Water Supply Withdrawn, Demand, Populations Served, and Per Capita Water Use

Planning Region	County / Region	Withdrawals and Water Demand (mgd)				Populations and Per Capita Water Use (gpcd)		
		Reported Pumpage	Imports	Exports	Finished Water Demand	Public Supply Adjusted <sup>(1)</sup> Population Served	Average GROSS Per Capita Water Use	Average RESIDENTIAL Per Capita Water Use
I	Escambia	40.055	-	-	40.055	321,433	124.61	79.82
	<b>Totals/Average Per Capita</b>	<b>40.055</b>	<b>0.000</b>	<b>0.000</b>	<b>40.055</b>	<b>321,433</b>	<b>124.61</b>	<b>79.82</b>
II	Okaloosa	20.837	3.562	-	24.398	231,232	105.51	60.60
	Santa Rosa	18.403	6.365	6.365	18.403	192,404	95.30	64.41
	Walton	16.634	2.566	6.127	13.072	129,127	101.23	63.43
	<b>Totals/Average Per Capita</b>	<b>55.873</b>	<b>12.492</b>	<b>12.492</b>	<b>55.873</b>	<b>552,763</b>	<b>101.08</b>	<b>62.59</b>
III	Bay	29.864	26.584	26.584	29.864	187,942	151.21	72.91
	<b>Totals/Average Per Capita</b>	<b>29.864</b>	<b>26.584</b>	<b>26.584</b>	<b>29.864</b>	<b>187,942</b>	<b>151.21</b>	<b>72.91</b>
IV	Calhoun	0.358	-	-	0.358	3,722	96.18	64.92
	Holmes	1.029	0.038	-	1.068	6,276	170.12	58.57
	Jackson	2.846	-	-	2.846	20,928	136.01	60.34
	Liberty	0.471	-	-	0.471	4,356	108.14	92.00
	Washington	1.070	-	0.038	1.032	7,007	147.28	90.72
<b>Totals/Average Per Capita</b>	<b>5.775</b>	<b>0.038</b>	<b>0.038</b>	<b>5.775</b>	<b>42,289</b>	<b>136.56</b>	<b>68.77</b>	
V	Franklin	2.014	0.000	0.000	2.014	16,661	120.90	63.07
	Gulf	3.236	-	-	3.236	20,490	157.91	40.39
	<b>Totals/Average Per Capita</b>	<b>5.250</b>	<b>0.000</b>	<b>0.000</b>	<b>5.250</b>	<b>37,151</b>	<b>141.31</b>	<b>50.56</b>
VI	Gadsden	4.046	-	-	4.046	31,988	126.48	78.93
	<b>Totals/Average Per Capita</b>	<b>4.046</b>	<b>0.000</b>	<b>0.000</b>	<b>4.046</b>	<b>31,988</b>	<b>126.48</b>	<b>78.93</b>
VII	Jefferson <sup>(NWF Only)</sup>	0.651	-	-	0.651	6,626	98.25	72.92
	Leon	30.103	-	0.546	29.557	264,368	111.80	58.16
	Wakulla	2.427	0.546	-	2.973	27,433	108.38	79.58
	<b>Totals/Average Per Capita</b>	<b>33.181</b>	<b>0.546</b>	<b>0.546</b>	<b>33.181</b>	<b>298,427</b>	<b>111.19</b>	<b>60.46</b>
<b>DISTRICT TOTALS/AVERAGE</b>		<b>174.044</b>	<b>39.660</b>	<b>39.660</b>	<b>174.044</b>	<b>1,471,993</b>	<b>118.24</b>	<b>67.47</b>

(1) Populations served include seasonal resident adjustments

## 1.2 Public Supply Water Withdrawals by Source (mgd)

Planning Region	County / Region	Coastal Floridan	Inland Floridan	Inter-mediate	Claiborne	Sand and Gravel	Surficial	Total Groundwater	Total Surface Water	TOTAL REPORTED WATER USE
I	Escambia	-	-	-	-	40.055	-	40.055	-	40.055
	<b>Region Totals</b>	-	-	-	-	<b>40.055</b>	-	<b>40.055</b>	-	<b>40.055</b>
II	Okaloosa	12.846	7.991	-	-	-	-	20.837	-	20.837
	Santa Rosa	0.876	0.257	-	-	17.270	-	18.403	-	18.403
	Walton	1.608	14.975	0.050	-	-	-	16.634	-	16.634
	<b>Region Totals</b>	<b>15.330</b>	<b>23.223</b>	<b>0.050</b>	-	<b>17.270</b>	-	<b>55.873</b>	-	<b>55.873</b>
III	Bay <sup>(1)</sup>	-	1.835	-	-	-	-	1.835	28.029	29.864
	<b>Region Totals</b>	-	<b>1.835</b>	-	-	-	-	<b>1.835</b>	<b>28.029</b>	<b>29.864</b>
IV	Calhoun	-	0.358	-	-	-	-	0.358	-	0.358
	Holmes	-	0.648	-	0.381	-	-	1.029	-	1.029
	Jackson	-	2.693	-	0.153	-	-	2.846	-	2.846
	Liberty	-	0.471	-	-	-	-	0.471	-	0.471
	Washington	-	1.070	-	-	-	-	1.070	-	1.070
	<b>Region Totals</b>	-	<b>5.241</b>	-	<b>0.535</b>	-	-	<b>5.775</b>	-	<b>5.775</b>
V	Franklin	2.014	-	-	-	-	-	2.014	-	2.014
	Gulf	0.467	0.208	0.000	-	-	-	0.676	2.560	3.236
	<b>Region Totals</b>	<b>2.481</b>	<b>0.208</b>	<b>0.000</b>	-	-	-	<b>2.690</b>	<b>2.560</b>	<b>5.250</b>
VI	Gadsden	-	4.046	-	-	-	-	4.046	-	4.046
	<b>Region Totals</b>	-	<b>4.046</b>	-	-	-	-	<b>4.046</b>	-	<b>4.046</b>
VII	Jefferson <sup>(NWF Only)</sup>	-	0.651	-	-	-	-	0.651	-	0.651
	Leon	-	30.103	-	-	-	-	30.103	-	30.103
	Wakulla	-	2.427	-	-	-	-	2.427	-	2.427
	<b>Region Totals</b>	-	<b>33.181</b>	-	-	-	-	<b>33.181</b>	-	<b>33.181</b>
<b>DISTRICT TOTALS</b>		<b>17.812</b>	<b>67.734</b>	<b>0.051</b>	<b>0.535</b>	<b>57.324</b>	-	<b>143.455</b>	<b>30.589</b>	<b>174.044</b>

(1) Bay County Board of County Commissioners (BCBOCC) surface water withdrawals from Deer Point Lake Reservoir exclude exports to large industrial users, and to Tyndall Air Force Base. See ICI for industrial and institutional water use estimates.

NOTE: Since 2015, public supply IWUP compliance data has been affected by adjustments in permit and reporting requirements, and by Emergency Executive Orders. As a result, the 2022 estimated public supply water use relies on DEP Monthly Operating Report (MOR) data and/or historical water use for approximately 15 percent of the total public supply utility systems.

### 1.3 Public Supply Water Demand, Populations Served, and Per Capita Water Use - by Utility

Planning Region	Public Supply Utility or Service Area	Withdrawals and Water Demand (mgd)				Populations and Per Capita Water Use (gpcd)		
		Reported Pumpage	Imports	Exports	Finished Water Demand	Public Supply Adjusted <sup>(1)</sup> Population Served	Average GROSS Per Capita Water Use	Average RESIDENTIAL Per Capita Water Use
I	<b>Escambia County</b>	<b>40.053</b>	<b>0.000</b>	<b>0.000</b>	<b>40.053</b>	<b>321,433</b>	<b>124.61</b>	<b>79.82</b>
	Central Water Works, Inc.	0.491	-	-	0.491	2,551	192.42	54.41
	Century, Town of	0.425	-	-	0.425	3,490	121.78	110.00
	Cottage Hill Water Works, Inc.	0.030	-	-	0.030	3,562	8.36	75.91
	Emerald Coast Utilities Authority (ECUA)	34.371	-	-	34.371	255,884	134.32	84.23
	Farm Hill Utilities, Inc.	0.721	-	-	0.721	9,006	80.02	59.43
	Gonzalez Utilities Association, Inc.	0.575	-	-	0.575	4,854	118.47	71.14
	Molino Utilities, Inc.	0.949	-	-	0.949	7,746	122.48	75.94
	People's Water Service Company	2.492	-	-	2.492	30,356	82.08	53.71
	EREC Water System	0.000	-	-	0.000	3,984	0.10	53.52
	<b>REGION I - Totals/Average Per Capita</b>	<b>40.053</b>	<b>0.000</b>	<b>0.000</b>	<b>40.053</b>	<b>321,433</b>	<b>124.61</b>	<b>79.82</b>
II	<b>Okaloosa County</b>	<b>20.837</b>	<b>3.562</b>	<b>0.000</b>	<b>24.398</b>	<b>231,232</b>	<b>105.51</b>	<b>60.60</b>
	Auburn Water System	2.294	-	-	2.294	15,895	144.31	97.42
	Baker Water System	0.248	-	-	0.248	2,825	87.65	71.07
	Okaloosa Waterworks-US Water Services	0.034	-	-	0.034	573	58.66	44.00
	Crestview, City of	2.335	-	-	2.335	37,450	62.35	21.86
	Destin Water Users	1.723	2.983	-	4.676	31,049	150.59	88.94
	Fort Walton Beach, City of	2.651	-	-	2.651	24,570	107.90	52.80
	Holt Water Works, Inc.	0.225	-	-	0.225	2,146	104.69	64.91
	Laurel Hill, City of	0.115	-	-	0.115	1,549	74.44	60.73
	Mary Esther, City of	0.456	-	-	0.456	4,027	113.24	57.74
	Milligan Water System	0.041	-	-	0.041	1,729	23.44	14.54
	Niceville, City of	2.629	-	-	2.629	20,980	125.31	86.77
	OCW&S - Bluewater	1.100	-	-	1.100	13,543	81.19	61.71
	OCW&S - Okaloosa County Water & Sewer	3.843	-	-	3.843	66,336	98.64	53.78
	<i>Main Garniers</i>					-		-
	<i>Shalimar</i>					-		-
	<i>Okaloosa Island</i>					-		-
<i>County West</i>					-		-	
OCW&S - Mid-County	2.700	-	-	2.700	-	-	-	
SWUC (Okaloosa County portion)	-	0.609	-	0.609	3,508	173.61	102.17	
Valparaiso, City of	0.444	-	-	0.444	5,052	87.82	57.04	

Table 1.3, continued

Planning Region	Public Supply Utility / County / Region	Withdrawals and Water Demand (mgd)				Populations and Per Capita Water Use (gpcd)		
		Reported Pumpage	Imports	Exports	Finished Water Demand	Public Supply Adjusted <sup>(1)</sup> Population Served	Average GROSS Per Capita Water Use	Average RESIDENTIAL Per Capita Water Use
II	<b>Santa Rosa County</b>	<b>18.403</b>	<b>6.365</b>	<b>6.365</b>	<b>18.380</b>	<b>192,404</b>	<b>95.53</b>	<b>64.41</b>
	Bagdad-Garcon Point Water System	0.698	-	-	0.698	5,945	117.47	79.08
	Berrydale Water System	0.291	-	-	0.291	3,430	84.82	37.91
	Chumuckla Water System	0.417	-	-	0.417	5,137	81.16	65.68
	East Milton Water System	1.427	-	-	1.427	14,592	97.77	65.37
	Fairpoint Regional Utility System (FRUS)	6.431	-	6.365	-	-	-	0.00
	Gulf Breeze Water Department (Service Area)	-	2.059	0.043	2.102	6,613	317.79	238.34
	Holley-Navarre Water System, Inc.	0.580	2.713	-	3.294	44,503	74.01	55.63
	Jay, Town of	0.172	-	-	0.172	1,834	93.93	58.23
	Midway Water System	0.588	1.085	0.043	1.630	18,036	90.37	63.74
	Milton, City of	2.010	-	-	2.010	18,520	108.53	71.90
	Moore Creek-Mt. Carmel Utilities, Inc.	0.321	-	-	0.321	3,194	100.63	62.39
	Pace Water System, Inc.	4.586	-	-	4.586	44,488	103.08	58.45
	Point Baker Water System, Inc.	0.869	-	-	0.869	9,400	92.40	79.78
	Navarre Beach - Santa Rosa BOCC	0.013	0.508	-	0.521	6,019	86.54	51.91
	South Santa Rosa Utilities (Service Area)	-	0.043	-	0.043	10,693	-	0.00
II	<b>Walton County</b>	<b>16.634</b>	<b>2.566</b>	<b>6.127</b>	<b>13.072</b>	<b>129,127</b>	<b>101.23</b>	<b>63.43</b>
	Argyle Water System	0.075	-	-	0.075	793	94.84	71.13
	DeFuniak Springs, City of	1.289	-	-	1.289	15,427	83.55	34.94
	FCSWC / Regional Utilities	6.394	-	-	6.394	70,615	90.55	59.40
	Freeport, City of	1.195	-	-	1.195	12,710	94.04	67.34
	Freeport, City of, North Bay Water System	0.138	-	-	0.138	3,178	43.36	39.82
	Inlet Beach Water System, Inc.	0.280	-	-	0.280	2,615	107.15	66.67
	Mossy Head Water Works, Inc.	0.335	-	-	0.335	3,806	87.93	54.51
	Paxton, City of	0.168	-	-	0.168	1,566	107.47	98.87
	SWUC - Rockhill Inland Well Field	5.518	-	5.518	0.000	-	-	-
	SWUC - Coastal Well Field	1.241	2.566	0.609	3.197	18,416	173.61	102.17
<b>REGION II - Totals/Average Per Capita</b>		<b>55.873</b>	<b>12.492</b>	<b>12.492</b>	<b>55.850</b>	<b>552,763</b>	<b>100.96</b>	<b>62.59</b>

Table 1.3, continued

Planning Region	Public Supply Utility / County / Region	Withdrawals and Water Demand (mgd)				Populations and Per Capita Water Use (gpcd)		
		Reported Pumpage	Imports	Exports	Finished Water Demand	Public Supply Adjusted <sup>(1)</sup> Population Served	Average GROSS Per Capita Water Use	Average <sup>(2)</sup> RESIDENTIAL Per Capita Water Use
III	<b>Bay County</b>	<b>29.864</b>	<b>26.584</b>	<b>26.584</b>	<b>29.864</b>	<b>187,942</b>	<b>158.90</b>	<b>72.91</b>
	Bay County BOCC (Public Supply ONLY)	28.029	-	-	-	11,692	-	-
	Bay County - Cedar Grove	-	0.568	-	0.568	3,450	164.66	102.09
	Bay County - North Bay/Lake Merial	-	0.671	-	0.671	6,000	111.87	69.36
	Bay County - Bay Co. (excludes North Bay, Lk Merial, St)	-	1.087	-	1.087	9,500	114.46	70.97
	Bay County BOCC - Total Exports	-	-	26.584	-	-	-	-
	Callaway	-	1.334	-	1.334	15,269	87.34	54.15
	Lynn Haven, City of	1.835	0.512	-	2.347	23,233	101.01	56.88
	Mexico Beach	-	0.191	-	0.191	2,488	76.77	47.60
	Panama City Water System	-	6.185	-	6.185	42,376	145.95	77.35
	Panama City Beach	-	14.664	-	14.664	61,798	237.29	94.92
	Parker	-	0.328	-	0.328	4,027	81.33	50.42
	Springfield	-	1.044	-	1.044	8,109	128.76	79.83
<b>REGION III - Totals/Average Per Capita</b>		<b>29.864</b>	<b>26.584</b>	<b>26.584</b>	<b>29.864</b>	<b>187,942</b>	<b>158.90</b>	<b>72.91</b>

**NOTE:** The Bay County Board of County Commissioners (BOCC) water utility serves the majority of service areas (except for parts of the City of Lynn Haven) in Bay County. Water withdrawn and supplied to several large industrial facilities and to Tyndall Air Force Base are excluded from Public Supply and included in ICI.

(2) County-wide average estimate.

Table 1.3, continued

Planning Region	Public Supply Utility / County / Region	Withdrawals and Water Demand (mgd)				Populations and Per Capita Water Use (gpcd)		
		Reported Pumpage	Imports	Exports	Finished Water Demand	Public Supply Adjusted <sup>(1)</sup> Population Served	Average GROSS Per Capita Water Use	Average RESIDENTIAL Per Capita Water Use
V	<b>Franklin County</b>	<b>2.014</b>	<b>0.000</b>	<b>0.000</b>	<b>2.014</b>	<b>16,661</b>	<b>120.90</b>	<b>63.07</b>
	Alligator Point Water Resources District	0.095	-	-	0.095	1,400	67.92	55.39
	Apalachicola, City of	0.613	-	-	0.613	3,784	163.35	58.04
	Carrabelle, City of	0.333	-	-	0.333	2,766	120.33	74.60
	- Carrabelle, City of (Lanark Village)	0.103	-	-	0.103	1,625	63.36	0.00
	Eastpoint Water and Sewer District	0.225	-	-	0.225	2,333	96.27	59.69
	St. James Island (Summercamp, FRWA)	0.007	-	-	0.007	56	134.96	65.50
	Water Management (St. George Island)	0.638	-	-	0.638	4,727	134.98	85.93
V	<b>Gulf County</b>	<b>3.236</b>	<b>0.000</b>	<b>0.000</b>	<b>3.236</b>	<b>20,490</b>	<b>157.91</b>	<b>40.39</b>
	Gulf County Water System	0.466	-	-	0.466	3,804	122.45	78.46
	Port St. Joe, City of	2.561	-	-	2.561	14,562	175.90	27.46
	Wewahitchka, City of	0.208	-	-	0.208	2,124	98.11	60.83
<b>REGION V - Totals/Average Per Capita</b>		<b>5.250</b>	<b>0.000</b>	<b>0.000</b>	<b>5.250</b>	<b>37,151</b>	<b>141.31</b>	<b>50.56</b>

Table 1.3, continued

Planning Region	Public Supply Utility / County / Region	Withdrawals and Water Demand (mgd)				Populations and Per Capita Water Use (gpcd)		
		Reported Pumpage	Imports	Exports	Finished Water Demand	Public Supply Adjusted <sup>(1)</sup> Population Served	Average GROSS Per Capita Water Use	Average RESIDENTIAL Per Capita Water Use
IV	<b>Calhoun County</b>	<b>0.358</b>	<b>0.000</b>	<b>0.000</b>	<b>0.358</b>	<b>3,722</b>	<b>96.18</b>	<b>64.92</b>
	Altha, Town of	0.080	-	-	0.080	692	116.28	72.09
	Blountstown	0.278	-	-	0.278	3,031	91.60	63.29
IV	<b>Holmes County</b>	<b>1.029</b>	<b>0.038</b>	<b>0.000</b>	<b>1.068</b>	<b>6,276</b>	<b>170.12</b>	<b>58.57</b>
	Bonifay, City of	0.964	-	-	0.964	4,246	227.11	67.45
	Caryville, Town of (Holmes County portion)	-	0.038	-	0.038	271	141.19	141.19
	Esto Water Works	0.027	-	-	0.027	348	77.26	47.90
	Joyce E. Snare Waterworks	0.000	-	-	0.000	254	-	0.00
	Noma, Town of	0.006	-	-	0.006	237	26.04	16.15
	Ponce de Leon, Town of	0.000	-	-	0.000	586	-	4.35
	Westville, Town of	0.032	-	-	0.032	334	95.90	59.46
IV	<b>Jackson County</b>	<b>2.846</b>	<b>0.000</b>	<b>0.000</b>	<b>2.846</b>	<b>20,928</b>	<b>136.01</b>	<b>60.34</b>
	Alford, Town of	0.061	-	-	0.061	586	104.71	41.88
	Campbellton, Town of	0.000	-	-	0.000	281	-	0.00
	Cottondale, City of	0.000	-	-	0.000	1,099	-	0.00
	Graceville, City of	0.640	-	-	0.640	2,159	296.38	57.21
	Grand Ridge, Town of	0.092	-	-	0.092	962	96.01	38.40
	Greenwood, Town of	0.043	-	-	0.043	551	78.40	31.36
	Jackson Utilities, Plant 1, JCBOCC	0.222	-	-	0.222	3,678	60.33	52.70
	Jacob, City of	0.000	-	-	0.000	219	-	0.00
	Malone, Town of	0.067	-	-	0.067	1,244	53.62	21.45
	Marianna, City of	1.488	-	-	1.488	8,227	180.89	90.78
	Sneads, Town of	0.233	-	-	0.233	1,840	126.51	50.60
	IV	<b>Liberty County</b>	<b>0.471</b>	<b>0.000</b>	<b>0.000</b>	<b>0.471</b>	<b>4,356</b>	<b>108.14</b>
Bristol, City of		0.195	-	-	0.195	1,923	101.36	118.92
Liberty Co. BOCC, Estiffanulga (Talquin)		0.022	-	-	0.022	281	77.07	47.79
Liberty Co. BOCC, Hosford-Telogia (Talquin)		0.148	-	-	0.148	1,444	102.50	63.55
Liberty Co. BOCC, Lake Mystic (Talquin)		0.047	-	-	0.047	314	148.97	92.36
Liberty Co. BOCC, Rock Bluff (Talquin)		0.035	-	-	0.035	166	211.92	131.39
Liberty Co. BOCC, Sumatra Water System		0.018	-	-	0.018	163	109.56	67.92
Talquin Electric - Sweetwater System		0.007	-	-	0.007	65	102.46	76.84
IV	<b>Washington</b>	<b>1.070</b>	<b>0.000</b>	<b>0.038</b>	<b>1.032</b>	<b>7,007</b>	<b>147.28</b>	<b>90.72</b>
	Sunny Hills (formerly Aqua Utilities)	0.152	-	-	0.152	1,458	104.29	43.16
	Caryville, Town of	0.128	-	0.038	0.089	426	209.63	209.63
	Chipley, City of	0.605	-	-	0.605	3,885	155.61	98.85
	Vernon, City of	0.117	-	-	0.117	750	156.54	75.77
	Wausau, Town of	0.069	-	-	0.069	488	140.81	87.30
<b>REGION IV - Totals/Average Per Capita</b>		<b>5.775</b>	<b>0.038</b>	<b>0.038</b>	<b>5.775</b>	<b>42,289</b>	<b>136.56</b>	<b>68.77</b>

Table 1.3, continued

Planning Region	Public Supply Utility / County / Region	Withdrawals and Water Demand (mgd)				Populations and Per Capita Water Use (gpcd)		
		Reported Pumpage	Imports	Exports	Finished Water Demand	Public Supply Adjusted <sup>(1)</sup> Population Served	Average GROSS Per Capita Water Use	Average RESIDENTIAL Per Capita Water Use
VI	<b>Gadsden County</b>	<b>4.046</b>	<b>0.000</b>	<b>0.000</b>	<b>4.046</b>	<b>31,988</b>	<b>126.48</b>	<b>78.93</b>
	Chattahoochee, City of	0.324	-	-	0.324	2,741	118.09	57.60
	Greensboro, Town of	0.067	-	-	0.067	794	84.10	45.42
	Gretna, City of	0.327	0.115	-	0.442	1,483	297.70	184.58
	Havana, Town of	0.508	-	-	0.508	3,555	142.87	88.58
	Quincy, City of	1.280	-	0.115	1.166	10,391	116.98	72.53
	Talquin Electric - Gadsden County Regional	1.525	-	-	1.525	13,128	116.20	76.82
	Talquin Electric - Hammock Creek	0.000	-	-	0.000	40	-	0.00
	Talquin Electric - Jamieson Water	0.015	-	-	0.015	107	139.53	104.65
	Talquin Electric - St. James	0.000	-	-	0.000	175	-	0.00
	<b>REGION VI - Totals/Average Per Capita</b>		<b>4.046</b>	<b>0.000</b>	<b>0.000</b>	<b>4.046</b>	<b>31,988</b>	<b>126.48</b>
VII	<b>Jefferson County</b> <sup>(NWF Only)</sup>	<b>0.651</b>	<b>0.000</b>	<b>0.000</b>	<b>0.651</b>	<b>6,626</b>	<b>98.25</b>	<b>72.92</b>
	Jefferson Communities Water System, Inc.	0.208	-	-	0.208	2,153	96.79	83.39
	Monticello, City of	0.443	-	-	0.443	4,473	98.96	67.88
	<b>Leon County</b>	<b>30.103</b>	<b>0.000</b>	<b>0.546</b>	<b>29.557</b>	<b>264,368</b>	<b>111.80</b>	<b>58.16</b>
	Seminole-Rowe (total all service areas)	0.114	-	-	0.114	1,601	71.30	56.61
	Tallahassee, City of	26.284	-	0.546	25.738	227,849	112.96	56.61
	Talquin Electric - Bradfordville Regional	1.569	-	-	1.569	12,247	128.10	79.42
	Talquin Electric - Lake Jackson Regional	1.168	-	-	1.168	11,487	101.64	62.13
	Talquin Electric - Leon County East Regional	0.262	-	-	0.262	2,019	130.00	95.57
	Talquin Electric - Leon County West Regional	0.238	-	-	0.238	2,403	99.17	72.48
	Talquin Electric - Meadows Regional	0.444	-	-	0.444	4,333	102.52	74.06
	Talquin Electric Coop Small Systems (total)	0.024	-	-	0.024	1,346	17.90	13.42
	Miscellaneous Small Public Systems (total)	0.000	-	-	0.000	1,083	-	0.00
	<b>Wakulla County</b>	<b>2.427</b>	<b>0.546</b>	<b>0.000</b>	<b>2.973</b>	<b>27,433</b>	<b>108.38</b>	<b>79.58</b>
	Panacea Area Water System, Inc.	0.243	-	-	0.243	2,556	95.03	58.92
	Sopchoppy, City of	1.010	-	-	1.010	10,847	93.08	82.51
	St. Marks, City of, Water Sys. (COT Booster Plant)	-	0.213	-	0.213	708	300.58	186.36
Tallahassee, City of (Wakulla County portion)	-	0.333	-	0.333	2,745	121.28	70.48	
Talquin Electric - Wakulla Regional	1.134	-	-	1.134	10,301	110.05	75.84	
Talquin Electric - Wakulla County River Sink	0.041	-	-	0.041	276	148.91	111.68	
<b>REGION VII - Totals/Average Per Capita</b>		<b>33.181</b>	<b>0.546</b>	<b>0.546</b>	<b>33.181</b>	<b>298,427</b>	<b>111.19</b>	<b>60.46</b>
<b>NFWWMD Districtwide TOTALS / Averages -</b>		<b>174.042</b>	<b>39.660</b>	<b>39.660</b>	<b>174.019</b>	<b>1,471,993</b>	<b>118.22</b>	<b>67.47</b>

## 2.1 Domestic Self-Supply Population and Water Use Estimates

Planning Region	County / Region	DSS <sup>(1)</sup> Pop Estimate	Estimated DSS Water Use <sup>(2)</sup> (mgd)	Adjusted DSS Populations <sup>(3)</sup>	GROSS DSS <sup>(4)</sup> Well Count	BEBR 2021 PPH <sup>(5)</sup>	Estimated Persons Per Well	Estimated Water Use <sup>(6)</sup> (mgd)
I	Escambia	23,802	2.023	21,931	1,659	2.36	13.22	0.333
	<b>Total/Average</b>	<b>23,802</b>	<b>2.023</b>	<b>21,931</b>	<b>1,659</b>	<b>2.36</b>	<b>13.22</b>	<b>0.333</b>
II	Okaloosa	15,899	1.351	14,483	3,187	2.47	4.54	0.669
	Santa Rosa	12,559	1.068	8,142	4,539	2.62	1.79	1.011
	Walton	6,189	0.526	6,189	8,857	2.43	0.70	1.829
	<b>Total/Average</b>	<b>34,647</b>	<b>2.945</b>	<b>28,814</b>	<b>16,583</b>	<b>2.51</b>	<b>2.35</b>	<b>3.509</b>
III	Bay	28,834	2.451	27,695	15,017	2.45	1.84	3.127
	<b>Total/Average</b>	<b>28,834</b>	<b>2.451</b>	<b>27,695</b>	<b>15,017</b>	<b>2.45</b>	<b>1.84</b>	<b>3.127</b>
IV	Calhoun	10,430	0.887	9,782	4,079	2.47	2.40	0.856
	Holmes	13,706	1.165	12,460	4,942	2.43	2.52	1.021
	Jackson	28,736	2.443	25,834	11,682	2.38	2.21	2.363
	Liberty	4,180	0.355	2,770	1,455	2.44	1.90	0.302
	Washington	19,279	1.639	18,456	8,359	2.51	2.21	1.783
	<b>Total/Average</b>	<b>76,331</b>	<b>6.488</b>	<b>69,302</b>	<b>30,517</b>	<b>2.45</b>	<b>2.25</b>	<b>6.326</b>
V	Franklin	1,241	0.105	1,241	1,221	2.22	1.02	0.230
	Gulf	4,488	0.381	6,157	2,078	2.32	2.96	0.410
	<b>Total/Average</b>	<b>5,729</b>	<b>0.487</b>	<b>7,398</b>	<b>3,299</b>	<b>2.27</b>	<b>1.99</b>	<b>0.640</b>
VI	Gadsden	13,533	1.150	10,793	4,093	2.47	2.64	0.859
	<b>Total/Average</b>	<b>13,533</b>	<b>1.150</b>	<b>10,793</b>	<b>4,093</b>	<b>2.47</b>	<b>2.64</b>	<b>0.859</b>
VII	Jefferson <sup>(NWF Only)</sup>	4,970	0.422	4,970	2,471	2.31	2.01	0.485
	Leon	38,869	3.304	37,710	10,294	2.28	3.66	1.995
	Wakulla	10,094	0.858	9,051	4,477	2.53	2.02	0.963
	<b>Total/Average</b>	<b>53,933</b>	<b>4.584</b>	<b>51,731</b>	<b>17,242</b>	<b>2.37</b>	<b>2.57</b>	<b>3.443</b>
<b>TOTALS/AVERAGES</b>		<b>236,809</b>	<b>20.129</b>	<b>217,664</b>	<b>88,410</b>	<b>2.41</b>	<b>2.68</b>	<b>18.237</b>

(1) Domestic Self-Supply (DSS) includes small limited public supply systems and inmate populations that are not reported or estimated in the public supply water use category.

(2) Estimated water use based on DSS population estimate multiplied by a USGS per capita Districtwide estimated rate of 85 gpcd (USGS, 2020).

(3) "Adjusted DSS Populations" is an experimental estimate with inmate population refinements not otherwise accounted for.

(4) Estimates of all known DSS (DO) and limited public supply (LP) wells in NFWFMD wells inventory ArcGIS database as of 12/31/2022.

(5) County-wide average persons per household (PPH) based on UF Bureau of Economic and Business Research (BEBR) 2022 population estimate data.

(6) For information or comparison only: estimated water use, based on number of known wells x BEBR average PPH x USGS per capita water use rate of 88.67 gpcd.



## 2.2 Domestic Self-Supply Population Estimates Over Time

Planning Region	County / Region	WSA 2013 2010	NFWFMD Annual Water Use Reports <sup>(1)</sup>										
			2012	2013	2014 <sup>(2)</sup>	2015	2016	2017	2018	2019	2020	2021	2022
I	Escambia	16,606	19,133	17,720	18,809	12,017	11,958	11,242	15,118	17,231	20,903	18,513	23,802
	<b>Region I Total</b>	<b>16,606</b>	<b>19,133</b>	<b>17,720</b>	<b>18,809</b>	<b>12,017</b>	<b>11,958</b>	<b>11,242</b>	<b>15,118</b>	<b>17,231</b>	<b>20,903</b>	<b>18,513</b>	<b>23,802</b>
II	Okaloosa	12,367	13,885	11,731	12,224	23,940	18,595	9,375	12,916	10,382	10,010	13,122	15,899
	Santa Rosa	22,402	11,584	11,772	8,907	2,890	1,794	10,368	13,228	11,997	10,468	7,538	12,559
	Walton	4,218	14,117	13,106	16,009	17,616	11,508	15,896	16,019	10,997	4,793	3,801	6,189
	<b>Region II Total</b>	<b>38,987</b>	<b>39,586</b>	<b>36,609</b>	<b>37,140</b>	<b>44,446</b>	<b>31,897</b>	<b>35,639</b>	<b>42,163</b>	<b>33,377</b>	<b>25,270</b>	<b>24,461</b>	<b>34,647</b>
III	Bay	17,892	18,436	17,930	18,538	17,743	16,364	19,142	21,767	15,884	23,579	22,427	28,834
	<b>Region III Total</b>	<b>17,892</b>	<b>18,436</b>	<b>17,930</b>	<b>18,538</b>	<b>17,743</b>	<b>16,364</b>	<b>19,142</b>	<b>21,767</b>	<b>15,884</b>	<b>23,579</b>	<b>22,427</b>	<b>28,834</b>
IV	Calhoun	10,423	10,435	10,415	10,311	10,417	11,237	11,699	11,808	10,752	11,201	10,371	10,430
	Holmes	13,929	14,275	14,328	14,316	14,554	14,659	14,502	14,436	13,761	13,712	13,586	13,706
	Jackson	33,022	34,163	34,666	34,491	35,409	35,244	36,528	33,333	29,367	27,148	27,503	28,736
	Liberty	5,092	4,410	4,407	4,584	5,478	5,460	5,485	5,679	5,361	5,101	3,780	4,180
	Washington	16,420	17,642	17,255	17,501	18,814	18,765	19,285	19,087	19,015	19,153	18,799	19,279
	<b>Region IV Total</b>	<b>78,886</b>	<b>80,925</b>	<b>81,071</b>	<b>81,203</b>	<b>84,672</b>	<b>85,366</b>	<b>87,499</b>	<b>84,343</b>	<b>78,256</b>	<b>76,315</b>	<b>74,039</b>	<b>76,331</b>
V	Franklin	1,785	2,967	1,772	1,611	1,821	1,843	3,668	2,034	1,287	742	734	1,241
	Gulf	2,487	2,071	2,005	475	3,629	3,774	5,512	5,182	1,902	3,431	3,129	4,488
	<b>Region V Total</b>	<b>4,272</b>	<b>5,038</b>	<b>3,777</b>	<b>2,086</b>	<b>5,450</b>	<b>5,617</b>	<b>9,180</b>	<b>7,216</b>	<b>3,189</b>	<b>4,173</b>	<b>3,862</b>	<b>5,729</b>
VI	Gadsden	15,173	16,119	15,095	16,286	17,085	17,155	18,731	18,750	16,958	15,758	13,376	13,533
	<b>Region VI Total</b>	<b>15,173</b>	<b>16,119</b>	<b>15,095</b>	<b>16,286</b>	<b>17,085</b>	<b>17,155</b>	<b>18,731</b>	<b>18,750</b>	<b>16,958</b>	<b>15,758</b>	<b>13,376</b>	<b>13,533</b>
VII	Jefferson <sup>(NWF Only)</sup>	9,350	5,588	10,237	7,800	5,160	5,216	5,421	5,989	5,116	4,754	4,722	4,970
	Leon	59,552	75,085	74,538	57,952	51,884	51,414	32,616	38,154	36,527	38,858	35,644	38,869
	Wakulla	24,872	9,110	7,987	8,007	9,591	9,516	8,886	9,018	10,980	8,894	9,193	10,094
	<b>Region VII Total</b>	<b>93,774</b>	<b>89,783</b>	<b>92,762</b>	<b>73,759</b>	<b>66,635</b>	<b>66,147</b>	<b>46,923</b>	<b>53,161</b>	<b>52,622</b>	<b>52,506</b>	<b>49,558</b>	<b>53,932</b>
<b>TOTALS</b>		<b>265,590</b>	<b>269,020</b>	<b>264,964</b>	<b>247,821</b>	<b>248,048</b>	<b>234,504</b>	<b>228,356</b>	<b>242,518</b>	<b>217,517</b>	<b>218,505</b>	<b>206,237</b>	<b>236,808</b>

(1) Population estimates from 2015 to date include seasonal population adjustments. County total BEBR estimates are adjusted with estimated impacts of seasonal residents, and public supply populations served also includes estimates of seasonal residents where applicable. District studies indicate that approximately 10% of seasonal populations are in the domestic self-supply water use category. Therefore, the net county populations not served by public supply, i.e. DSS, also include seasonal resident estimates.

(2) Year 2014 included seasonal population adjustments in public supply utility populations served in Walton and Franklin counties.

### 3.1 Agricultural Water Use Reported and Total Estimates (mgd)

#### 2022 Reported Water Use

Planning Region	County / Region	Ground Water	Surface Water	Total REPORTED Water Use <sup>(1)</sup>	Percent Reported to Total Estimate	Additional FSAID <sup>(2)</sup> Estimated Water Use	FSAID XI - 2022 Estimated TOTAL Water Use <sup>(3)</sup>	FSAID X - 2021 Estimated TOTAL Water Use <sup>(4)</sup>
I	Escambia	0.124	-	0.124	4.0%	2.969	3.093	2.992
	<b>Region I Total</b>	<b>0.124</b>	<b>0.000</b>	<b>0.124</b>	<b>4.0%</b>	<b>2.969</b>	<b>3.093</b>	<b>2.992</b>
II	Okaloosa	0.122	-	0.122	25.7%	0.351	0.473	0.484
	Santa Rosa	0.562	-	0.562	31.4%	1.227	1.788	1.756
	Walton	0.304	-	0.304	28.4%	0.767	1.071	1.063
	<b>Region II Total</b>	<b>0.987</b>	<b>0.000</b>	<b>0.987</b>	<b>29.6%</b>	<b>2.345</b>	<b>3.332</b>	<b>3.304</b>
III	Bay	0.003	-	0.003	0.4%	0.876	0.880	0.921
	<b>Region III Total</b>	<b>0.003</b>	<b>0.000</b>	<b>0.003</b>	<b>0.4%</b>	<b>0.876</b>	<b>0.880</b>	<b>0.921</b>
IV	Calhoun	2.468	0.037	2.505	84.0%	0.476	2.981	2.974
	Holmes	-	-	0.000	0.0%	0.904	0.904	0.898
	Jackson	18.289	0.124	18.413	58.0%	13.327	31.740	32.016
	Liberty	0.001	-	0.001	0.7%	0.105	0.106	0.104
	Washington	0.059	0.016	0.075	8.5%	0.811	0.886	0.882
	<b>Region IV Total</b>	<b>20.817</b>	<b>0.177</b>	<b>20.993</b>	<b>57.3%</b>	<b>15.623</b>	<b>36.617</b>	<b>36.875</b>
V	Franklin	-	-	0.000	0.0%	0.010	0.010	0.010
	Gulf	0.210	-	0.210	71.2%	0.085	0.295	0.295
	<b>Region V Total</b>	<b>0.210</b>	<b>0.000</b>	<b>0.210</b>	<b>68.8%</b>	<b>0.095</b>	<b>0.305</b>	<b>0.306</b>
VI	Gadsden	1.591	1.605	3.195	64.8%	1.737	4.932	4.858
	<b>Region VI Total</b>	<b>1.591</b>	<b>1.605</b>	<b>3.195</b>	<b>64.8%</b>	<b>1.737</b>	<b>4.932</b>	<b>4.858</b>
VII	Jefferson <sup>(NWF Only)</sup>	0.639	-	0.639	62.7%	0.380	1.019	1.017
	Leon	0.130	-	0.130	28.0%	0.335	0.465	0.452
	Wakulla	-	-	0.000	0.0%	0.119	0.119	0.854
	<b>Region VII Total</b>	<b>0.769</b>	<b>0.000</b>	<b>0.769</b>	<b>48.0%</b>	<b>0.833</b>	<b>1.603</b>	<b>2.323</b>
<b>TOTALS</b>		<b>24.500</b>	<b>1.781</b>	<b>26.282</b>	<b>51.8%</b>	<b>24.479</b>	<b>50.761</b>	<b>51.578</b>

(1) In 2022, approximately 51% of agriculture IWUPS had reported water use and were audited. Where appropriate, the previous year reported use was carried forward.

(2) Florida Statewide Agricultural Irrigation Demand (FSAID), Florida Department of Agriculture and Consumer Services (DACS), Office of Agricultural Water Policy. This column indicates the approximate amount of water that is estimated to be used (but not required to be reported) in northwest Florida.

(3) FSAID estimate based on average hypothetical rainfall (modeled results).

(4) Previous FSAID estimates for information and reference only.

### 3.2 Agricultural Reported Water Use by Source (mgd)

Planning Region	County / Region	Water Use by Groundwater Aquifer(s)						Total Ground-water	Total Surface Water	TOTAL 2022 REPORTED WATER USE	TOTAL 2021 REPORTED WATER USE <sup>(1)</sup>
		Coastal Floridan	Inland Floridan	Inter-mediate	Claiborne	Sand-and-Gravel	Surficial				
I	Escambia	-	-	-	-	0.124	-	0.124	-	0.124	0.030
	<b>Region I Total</b>	-	-	-	-	<b>0.124</b>	-	<b>0.124</b>	-	<b>0.124</b>	<b>0.030</b>
II	Okaloosa	-	0.122	-	-	-	-	0.122	-	0.122	0.000
	Santa Rosa	-	0.126	-	-	0.435	-	0.562	-	0.562	0.400
	Walton	-	0.304	-	-	-	-	0.304	-	0.304	0.440
	<b>Region II Total</b>	-	<b>0.552</b>	-	-	<b>0.435</b>	-	<b>0.987</b>	-	<b>0.987</b>	<b>0.840</b>
III	Bay	-	0.003	-	-	-	-	0.003	-	0.003	0.468
	<b>Region III Total</b>	-	<b>0.003</b>	-	-	-	-	<b>0.003</b>	-	<b>0.003</b>	<b>0.468</b>
IV	Calhoun	-	2.468	-	-	-	-	2.468	0.037	2.505	1.077
	Holmes	-	-	-	-	-	-	-	-	0.000	0.000
	Jackson	-	18.289	-	-	-	-	18.289	0.124	18.413	16.936
	Liberty	-	0.001	-	-	-	-	0.001	-	0.001	0.000
	Washington	-	0.059	-	-	-	-	0.059	0.016	0.075	0.018
	<b>Region IV Total</b>	-	<b>20.817</b>	-	-	-	-	<b>20.817</b>	<b>0.177</b>	<b>20.993</b>	<b>18.031</b>
V	Franklin	-	-	-	-	-	-	-	-	0.000	0.000
	Gulf	-	0.210	-	-	-	-	0.210	-	0.210	0.188
	<b>Region V Total</b>	-	<b>0.210</b>	-	-	-	-	<b>0.210</b>	-	<b>0.210</b>	<b>0.188</b>
VI	Gadsden	-	1.591	-	-	-	-	1.591	1.605	3.195	2.530
	<b>Region VI Total</b>	-	<b>1.591</b>	-	-	-	-	<b>1.591</b>	<b>1.605</b>	<b>3.195</b>	<b>2.530</b>
VII	Jefferson <sup>(NWF Only)</sup>	-	0.639	-	-	-	-	0.639	-	0.639	0.627
	Leon	-	0.130	-	-	-	-	0.130	-	0.130	0.140
	Wakulla	-	-	-	-	-	-	-	-	0.000	0.000
	<b>Region VII Total</b>	-	<b>0.769</b>	-	-	-	-	<b>0.769</b>	-	<b>0.769</b>	<b>0.766</b>
	<b>TOTALS</b>	-	<b>23.941</b>	-	-	<b>0.559</b>	-	<b>24.500</b>	<b>1.781</b>	<b>26.282</b>	<b>22.853</b>

(1) Reported agricultural water use in previous calendar years for information and reference only.

## 4.1 Recreational Irrigation Water Use - Reported and Total Estimates (mgd)

Planning Region	County / Region	2022 Reported Water Use			Additional Water Use Estimates <sup>(1)</sup>			ESTIMATED TOTAL WATER USE		
		Ground-water	Surface Water	Total District REPORTED Water Use	Ground-water	Surface Water	Total Additional Estimates	Ground-water	Surface Water	Estimated TOTAL Water Use
I	Escambia	0.315	0.771	1.087	1.165	0.000	1.165	1.480	0.771	2.251
	<b>Region I Total</b>	<b>0.315</b>	<b>0.771</b>	<b>1.087</b>	<b>1.165</b>	<b>0.000</b>	<b>1.165</b>	<b>1.480</b>	<b>0.771</b>	<b>2.251</b>
II	Okaloosa	1.498	2.002	3.500	1.893	0.000	1.893	3.391	2.002	5.393
	Santa Rosa	0.277	0.012	0.289	1.452	0.375	1.827	1.729	0.387	2.116
	Walton	1.807	0.376	2.182	0.907	0.187	1.095	2.714	0.563	3.277
	<b>Region II Total</b>	<b>3.582</b>	<b>2.390</b>	<b>5.972</b>	<b>4.252</b>	<b>0.562</b>	<b>4.814</b>	<b>7.834</b>	<b>2.952</b>	<b>10.786</b>
III	Bay	0.847	0.388	1.235	0.932	0.000	0.932	1.779	0.388	2.167
	<b>Region III Total</b>	<b>0.847</b>	<b>0.388</b>	<b>1.235</b>	<b>0.932</b>	<b>0.000</b>	<b>0.932</b>	<b>1.779</b>	<b>0.388</b>	<b>2.167</b>
IV	Calhoun	0.000	0.000	0.000	0.006	0.000	0.006	0.006	0.000	0.006
	Holmes	0.000	0.000	0.000	0.215	0.000	0.215	0.215	0.000	0.215
	Jackson	0.000	0.000	0.000	0.387	0.000	0.387	0.387	0.000	0.387
	Liberty	0.000	0.000	0.000	0.002	0.000	0.002	0.002	0.000	0.002
	Washington	0.266	0.000	0.266	0.015	0.000	0.015	0.282	0.000	0.282
	<b>Region IV Total</b>	<b>0.266</b>	<b>0.000</b>	<b>0.266</b>	<b>0.625</b>	<b>0.000</b>	<b>0.625</b>	<b>0.891</b>	<b>0.000</b>	<b>0.891</b>
V	Franklin	0.000	0.111	0.111	0.060	0.000	0.060	0.060	0.111	0.171
	Gulf	0.047	0.000	0.047	0.064	0.000	0.064	0.111	0.000	0.111
	<b>Region V Total</b>	<b>0.047</b>	<b>0.111</b>	<b>0.157</b>	<b>0.124</b>	<b>0.000</b>	<b>0.124</b>	<b>0.171</b>	<b>0.111</b>	<b>0.282</b>
VI	Gadsden	0.024	0.045	0.069	0.111	0.000	0.111	0.135	0.045	0.180
	<b>Region VI Total</b>	<b>0.024</b>	<b>0.045</b>	<b>0.069</b>	<b>0.111</b>	<b>0.000</b>	<b>0.111</b>	<b>0.135</b>	<b>0.045</b>	<b>0.180</b>
VII	Jefferson <sup>(NWF Only)</sup>	0.571	0.000	0.571	0.191	0.000	0.191	0.762	0.000	0.762
	Leon	1.351	0.428	1.779	0.663	0.240	0.903	2.014	0.668	2.682
	Wakulla	0.000	0.000	0.000	0.206	0.000	0.206	0.206	0.000	0.206
	<b>Region VII Total</b>	<b>1.922</b>	<b>0.428</b>	<b>2.350</b>	<b>1.060</b>	<b>0.240</b>	<b>1.300</b>	<b>2.982</b>	<b>0.668</b>	<b>3.650</b>
<b>TOTALS</b>		<b>7.003</b>	<b>4.133</b>	<b>11.136</b>	<b>8.269</b>	<b>0.802</b>	<b>9.071</b>	<b>15.272</b>	<b>4.935</b>	<b>20.207</b>

(1) Additional water use estimates include Individual Water Use Permits (IWUPs) with no reporting requirements, and estimates of water use from residential and other small-scale recreational wells with General Water Use Permits (GWUPs). Estimates developed from 2015 data for the 2018 WSA.

## 4.2 Recreational Irrigation Reported Water Use by Source (mgd)

Planning Region	County / Region	Water Use by Groundwater Aquifer(s)						Total Groundwater	Net Surface Water <sup>(1)</sup>	TOTAL REPORTED WATER USE <sup>(1)</sup>
		Coastal Floridan	Inland Floridan	Inter-mediate	Claiborne	Sand-and-Gravel	Surficial			
I	Escambia	-	-	-	-	0.294	0.021	0.315	0.771	1.087
	<b>Region I Total</b>	-	-	-	-	<b>0.294</b>	<b>0.021</b>	<b>0.315</b>	<b>0.771</b>	<b>1.087</b>
II	Okaloosa	-	0.019	-	-	1.479	-	1.498	2.002	3.500
	Santa Rosa	-	-	-	-	0.277	-	0.277	0.012	0.289
	Walton	-	0.404	0.045	-	1.173	0.186	1.807	0.376	2.182
	<b>Region II Total</b>	-	<b>0.423</b>	<b>0.045</b>	-	<b>2.929</b>	<b>0.186</b>	<b>3.582</b>	<b>2.390</b>	<b>5.972</b>
III	Bay	0.163	0.024	-	-	0.015	0.646	0.848	0.388	1.235
	<b>Region III Total</b>	<b>0.163</b>	<b>0.024</b>	-	-	<b>0.015</b>	<b>0.646</b>	<b>0.848</b>	<b>0.388</b>	<b>1.235</b>
IV	Calhoun	-	-	-	-	-	-	-	-	-
	Holmes	-	-	-	-	-	-	-	-	-
	Jackson	-	0.017	-	-	-	-	-	-	-
	Liberty	-	-	-	-	-	-	-	-	-
	Washington	-	0.266	-	-	-	-	0.266	-	0.266
	<b>Region IV Total</b>	-	<b>0.283</b>	-	-	-	-	<b>0.266</b>	-	<b>0.266</b>
V	Franklin	-	-	-	-	-	-	-	0.111	0.111
	Gulf	-	-	0.023	-	-	0.023	0.047	-	0.047
	<b>Region V Total</b>	-	-	<b>0.023</b>	-	-	<b>0.023</b>	<b>0.047</b>	<b>0.111</b>	<b>0.157</b>
VI	Gadsden	-	0.024	-	-	-	-	0.024	0.045	0.069
	<b>Region VI Total</b>	-	<b>0.024</b>	-	-	-	-	<b>0.024</b>	<b>0.045</b>	<b>0.069</b>
VII	Jefferson <sup>(NWF Only)</sup>	-	0.571	-	-	-	-	0.571	-	0.571
	Leon	-	1.351	-	-	-	-	1.351	0.428	1.779
	Wakulla	-	-	-	-	-	-	0.000	-	-
	<b>Region VII Total</b>	-	<b>1.922</b>	-	-	-	-	<b>1.922</b>	<b>0.428</b>	<b>2.350</b>
<b>TOTALS</b>		<b>0.163</b>	<b>2.676</b>	<b>0.068</b>	-	<b>3.238</b>	<b>0.876</b>	<b>7.004</b>	<b>4.133</b>	<b>11.136</b>

(1) Recreational water use systems are often complex water flows between ground and surface waters. Groundwater withdrawals sometimes supplement surface water ponds, and at times, may be co-mingled with reclaimed water. Net surface water, and total water use, are adjusted and estimated accordingly.

**NOTE:** Of the current 92 recreational IWUPs, pumping reports and audits have been completed for roughly 70 percent of Permittees. For IWUPs without pumping audits, where appropriate, the previous year reported use is carried forward as a proxy for 2022 estimated water use. These "proxy estimates" occur in ten counties: Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Gadsden, Leon, Wakulla, and Jefferson.

## 5.1 Industrial-Commercial-Institutional (ICI) Reported Water Use by Source (mgd)

Planning Region	County / Region	Water Use by Groundwater Aquifer(s)						Total Groundwater	Total Surface Water	TOTAL WATER USE <sup>(1)</sup>
		Coastal Floridan	Inland Floridan	Inter-mediate	Claiborne	Sand-and-Gravel	Surficial			
I	Escambia	-	-	-	-	23.379	0.140	23.518	0.639	24.157
	<b>Region I Total</b>	-	-	-	-	<b>23.379</b>	<b>0.140</b>	<b>23.518</b>	<b>0.639</b>	<b>24.157</b>
II	Okaloosa	0.469	1.139	-	-	0.145	-	1.753	-	1.753
	Santa Rosa	-	-	-	-	3.216	-	3.216	-	3.216
	Walton	-	0.041	-	-	-	0.000	0.041	0.274	0.315
	<b>Region II Total</b>	<b>0.469</b>	<b>1.180</b>	-	-	<b>3.361</b>	<b>0.000</b>	<b>5.009</b>	<b>0.274</b>	<b>5.284</b>
III	Bay <sup>(2)</sup>	0.045	0.546	-	-	-	-	0.591	17.640	18.231
	<b>Region III Total</b>	<b>0.045</b>	<b>0.546</b>	-	-	-	-	<b>0.591</b>	<b>17.640</b>	<b>18.231</b>
IV	Calhoun	-	0.209	-	-	-	-	0.209	-	0.209
	Holmes	-	-	-	-	-	-	-	-	-
	Jackson	-	0.792	-	0.060	-	-	0.852	-	0.852
	Liberty	-	0.240	-	-	-	0.028	0.268	0.002	0.270
	Washington	-	0.280	-	-	-	-	0.280	-	0.280
	<b>Region IV Total</b>	-	<b>1.520</b>	-	<b>0.060</b>	-	<b>0.028</b>	<b>1.608</b>	<b>0.002</b>	<b>1.610</b>
V	Franklin	0.017	-	-	-	-	-	0.017	-	0.017
	Gulf	-	0.246	-	-	-	-	0.246	-	0.246
	<b>Region V Total</b>	<b>0.017</b>	<b>0.246</b>	-	-	-	-	<b>0.263</b>	-	<b>0.263</b>
VI	Gadsden	-	0.473	-	-	-	-	0.473	0.000	0.473
	<b>Region VI Total</b>	-	<b>0.473</b>	-	-	-	-	<b>0.473</b>	<b>0.000</b>	<b>0.473</b>
VII	Jefferson <sup>(NWF Only)</sup>	-	-	-	-	-	-	-	-	-
	Leon	-	0.105	-	-	-	-	0.105	-	0.105
	Wakulla	-	1.077	-	-	-	-	1.077	-	1.077
	<b>Region VII Total</b>	-	<b>1.182</b>	-	-	-	-	<b>1.182</b>	-	<b>1.182</b>
	<b>TOTALS</b>	<b>0.531</b>	<b>5.147</b>	-	<b>0.060</b>	<b>26.739</b>	<b>0.168</b>	<b>32.645</b>	<b>18.556</b>	<b>51.201</b>

(1) Where applicable, water use that is recirculated and returned to source is, for estimating purposes, not considered to be contributing to total estimated consumptive water use. Total estimated water use is adjusted accordingly.

(2) Surface water source is the Deer Point Lake Reservoir supplied by Bay County Board of County Commissioners. See Public Supply for more information.

## 6.1 Thermoelectric Power Generation Reported Water Use by Source (mgd)

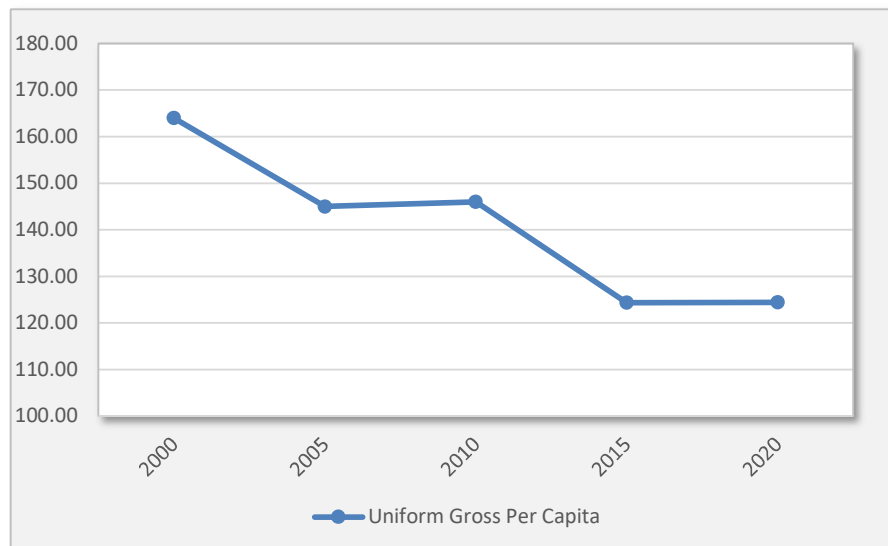
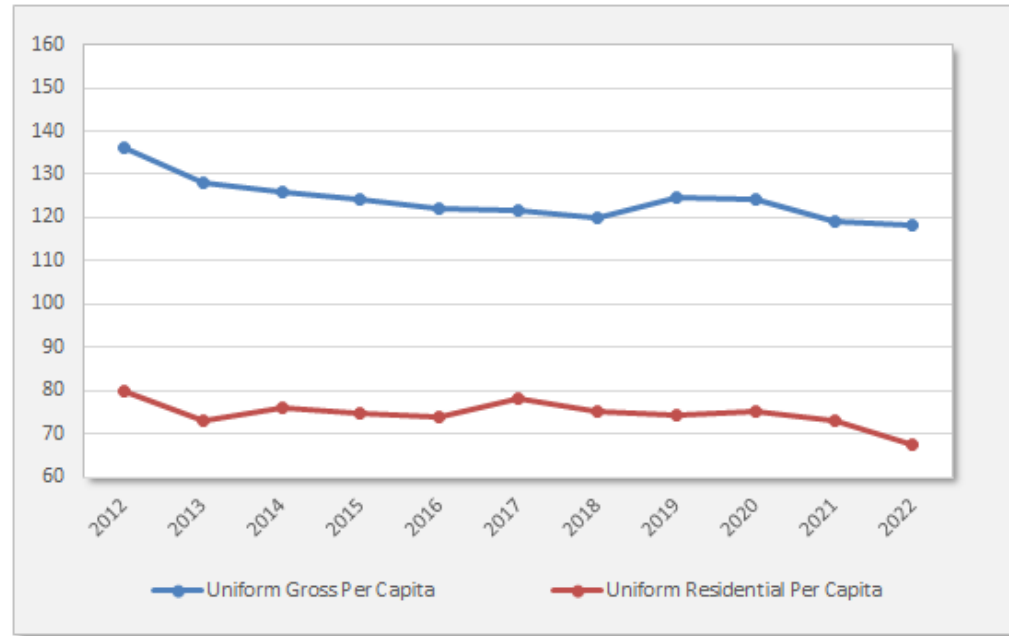
Planning Region	County / Region and Power Facility	Water Use by Groundwater Aquifer(s)						Total Groundwater	Total (Net Adjusted) Surface Water	TOTAL WATER USE <sup>(1)</sup>
		Coastal Floridan	Inland Floridan	Inter-mediate	Claiborne	Sand-and-Gravel	Surficial			
I	Escambia - Gulf / Crist	-	-	-	-	0.880	-	0.880	4.851	5.731
	Escambia - North Site	-	-	-	-	-	-	-	-	-
	<b>Region I Total</b>	-	-	-	-	<b>0.880</b>	-	<b>0.880</b>	<b>4.851</b>	<b>5.731</b>
II	Okaloosa	-	-	-	-	-	-	-	-	-
	Santa Rosa	-	-	-	-	1.170	-	-	-	-
	Walton	-	-	-	-	-	-	-	-	-
<b>Region II Total</b>	-	-	-	-	<b>1.170</b>	-	-	-	<b>0.000</b>	
III	Bay - BOCC Waste Energy	-	0.000	-	-	-	-	0.000	0.000	0.000
	Bay - Gulf / Lansing Smith	-	0.046	-	-	-	-	0.046	0.289	0.335
	<b>Region III Total</b>	-	<b>0.046</b>	-	-	-	-	<b>0.046</b>	<b>0.289</b>	<b>0.335</b>
IV	Calhoun	-	-	-	-	-	-	-	-	-
	Holmes	-	-	-	-	-	-	-	-	-
	Jackson - Gulf / Scholz	-	0.010	-	-	-	-	0.010	0.060	0.070
	Liberty - Telogia Power	-	0.206	-	-	-	-	0.206	-	0.206
	Washington	-	-	-	-	-	-	-	-	-
<b>Region IV Total</b>	-	<b>0.216</b>	-	-	-	-	<b>0.216</b>	<b>0.060</b>	<b>0.276</b>	
V	Franklin	-	-	-	-	-	-	-	-	-
	Gulf	-	-	-	-	-	-	-	-	-
<b>Region V Total</b>	-	-	-	-	-	-	-	-	<b>0.000</b>	
VI	Gadsden	-	-	-	-	-	-	-	-	-
	<b>Region VI Total</b>	-	-	-	-	-	-	-	-	<b>0.000</b>
VII	Jefferson <sup>(NWF Only)</sup>	-	-	-	-	-	-	-	-	-
	Leon - City of Tallahassee <sup>(2)</sup>	-	2.500	-	-	-	-	2.500	-	2.500
	Wakulla - City of Tallahassee	-	-	-	-	-	-	-	0.207	0.207
	<b>Region VII Total</b>	-	<b>2.500</b>	-	-	-	-	<b>2.500</b>	<b>0.207</b>	<b>2.707</b>
<b>TOTALS</b>		-	<b>2.762</b>	-	-	<b>2.050</b>	-	<b>4.812</b>	<b>5.407</b>	<b>9.049</b>

(1) Water withdrawn from surface water sources is typically used for cooling and returned to the source, and is not considered or estimated as consumptive water use.

(2) Arvah B. Hopkins Generating Station, Florida DEP Site Certification #PA 74-03. Provisional amount for estimated use, which was 1.95 mgd in 2015. Water withdrawal projections provided by the City of Tallahassee in August 2019 are 2.5 mgd when adjusted for groundwater discharge.

## Public Supply Per Capita Water Use Over Time (gpcd)

Year	Uniform Gross Per Capita	Uniform Residential Per Capita
1995	151.00	
2000	164.00	
2005	145.00	
2010	146.00	
2015	124.37	75.01
2016	122.14	74.08
2017	121.77	78.36
2018	120.03	75.44
2019	124.68	74.57
2020	124.43	75.40
2021	119.10	73.01
2022	118.24	67.47



### Five-Year Per Capita Averages, 2018-2022

**Uniform Gross Per Capita (gpcd) 121.29**

**Uniform Residential Per Capita (gpcd) 73.18**

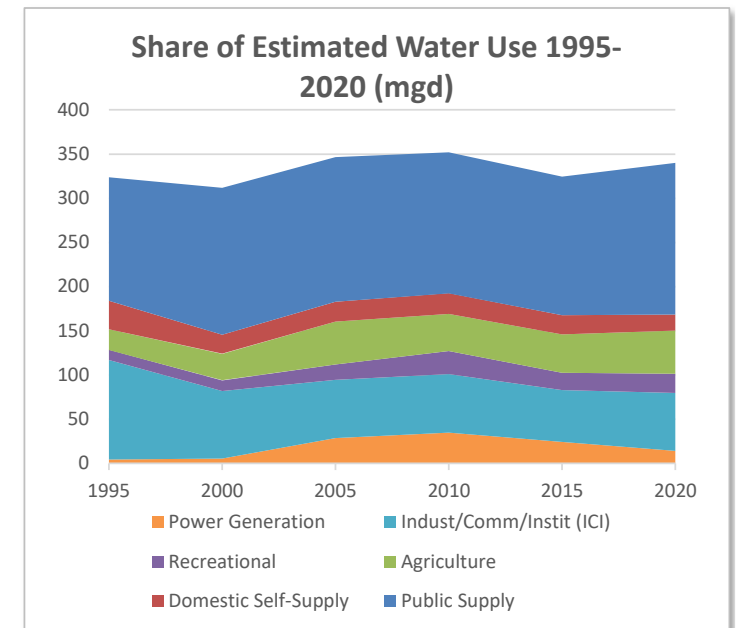
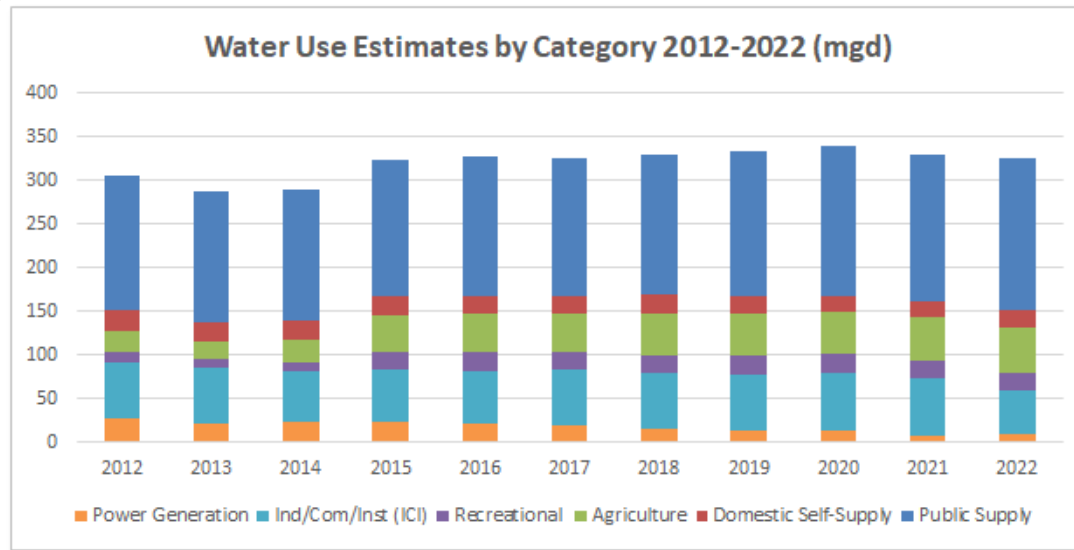
**NOTES.** Public supply per capita rates, in gallons per capita per day (gpcd), are calculated from public supply water use data and estimates of populations served. The sources of per capita rates are district water supply assessments and, since 2012, annual water use reports. Also since 2015, populations served estimates include seasonal resident adjustments in all counties.



## Trends in Share of and Total Water Use Estimates By Water Use Category (mgd)

Districtwide	1995	2000	2005	2010	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Public Supply	139.790	166.160	163.481	159.570	154.270	149.088	151.549	156.495	159.084	158.717	160.323	167.565	171.597	167.365	174.044
Domestic Self-Supply	32.140	21.632	22.386	23.272	23.754	23.361	22.216	22.021	20.794	20.249	21.505	19.288	18.127	18.287	20.129
Agriculture	23.400	30.100	48.630	42.030	24.817	18.410	25.157	43.240	43.360	43.466	49.261	48.879	49.112	49.758	50.761
Recreational	11.500	12.060	17.310	25.905	11.777	10.698	10.846	19.595	21.594	21.032	19.521	21.902	21.643	20.858	20.207
Ind/Com/Inst (ICI)	112.450	76.280	66.160	66.440	64.411	63.238	56.664	58.703	61.581	62.448	63.058	62.409	65.691	65.347	51.201
Power Generation	4.470	5.650	28.530	34.820	26.708	22.373	24.357	24.335	20.676	20.206	16.095	14.360	14.068	8.220	9.049
<b>Total Water Use</b>	<b>323.750</b>	<b>311.882</b>	<b>346.550</b>	<b>352.030</b>	<b>305.737</b>	<b>287.168</b>	<b>290.789</b>	<b>324.389</b>	<b>327.089</b>	<b>326.118</b>	<b>329.762</b>	<b>334.403</b>	<b>340.238</b>	<b>329.835</b>	<b>325.390</b>

\*2011 water use estimates not compiled at the time of this report.



### NOTES:

1. Agriculture and recreational water use estimates vary over time. In some cases, they are the sum of reported water use plus additional estimating methods (for WSAs, and 2015-2022). In other years agriculture and recreational estimates appear to be from reported use only.

2. In 2010, the agriculture water use estimate of 42.03 mgd reflects the value after corrections made in Gadsden County agricultural water use. Therefore, both the agriculture and total water use estimates do not match the WSA 2013 report data (errata never issued).

3. Differences in water use categories over time may reflect moving permittees from one category to another, for example, an industrial use moved to power generation, or splitting a permittees major uses across two or more water use categories (e.g. a municipality that also serves a correctional facility).