

Total estimated water use: 329 mgd

# Population estimates:<sup>1</sup>

- BEBR 1,510,330
- With seasonal adjustments - 1,619,459

# Public supply per capita:

- Gross 119 gpcd
- Residential 73 gpcd

### Acronyms

Bureau of Economic and Business Research (BEBR), University of Florida

Florida Department of Agriculture and Consumer Services (FDACS)

Domestic Self-Supply (DSS)

Florida Statewide Agricultural Irrigation Demand (FSAID)

Gallons per Capita per Day (gpcd)

General Water Use Permit (GWUP)

Industrial-Commercial-Institutional (ICI)

Individual Water Use Permit (IWUP)

Million Gallons Per Day (mgd)

Minimum Flows and Minimum Water Levels (MFLs)

United States Geological Survey (USGS)

# 2021 Estimated Water Use

in the

# **Northwest Florida Water Management District**

Estimated water use is foundational data for Northwest Florida Water Management District (NWFWMD or District) water supply assessments, regional water supply plans, groundwater models and MFL technical assessments, as well as for consumptive use permitting. Existing water use is the baseline data to develop water demand projections. The 2021 water use estimates include:

- 1. <u>Public supply</u> utility production withdrawals, water transfers, water demand, population estimates, and per capita rates;
- 2. <u>Domestic self-supply</u> (DSS) estimates based on population estimates and a USGS per capita rate of 88.67 gpcd;
- 3. <u>Agricultural</u> estimates of reported pumpage, and total estimates from FDACS/FSAID data;
- 4. <u>Recreational</u> irrigation, including landscape irrigation, based on reported and estimated pumpage;
- 5. Industrial-Commercial-Institutional (ICI) reported water use; and,
- 6. <u>Thermoelectric power generation</u> reported water use.

In 2021, the total estimated District water use was 329.8 mgd. Half or approximately 167.4 mgd was in the public supply water use category. ICl is the second largest water use category followed by agriculture.

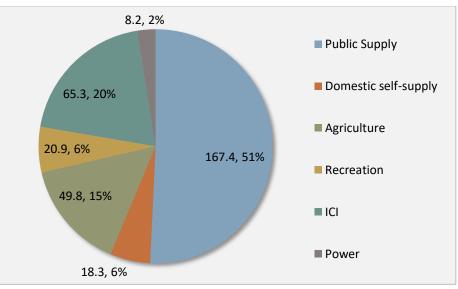


Figure 1. Total Water Use by Category (mgd)

Agriculture continues to be the largest water use category in Jackson County and in Region IV. Over half of all recreational water use was in Region II. The majority of ICI water use was in Escambia (51%) and Bay (36%) counties, and the majority of power generation water use was in regions III (37%) and VII (33%).

<sup>&</sup>lt;sup>1</sup> NWFWMD portion of Jefferson County only.

The District's sixteen counties are organized into seven water supply planning regions. Escambia County (Region I) is estimated to have accounted for nearly one-fourth (80.2 mgd) of all District water use in 2021. Rapidly growing and developing Region II followed with 75.3 mgd or 23 percent. Bay County (Region III) is the District's third largest water user at 59.0 mgd or 18 percent.

Population estimates with seasonal adjustments total 1,619,459. Seasonal residents are estimated to affect both public supply and DSS water use in all sixteen counties. Approximately 86 percent of District residents are estimated to be served by public supply. The five-year average gross public supply per capita water use rate from 2016-2020 was 122.0 gpcd.

### **2021** Population Estimates

REGION	BEBR Permanent Populations	Seasonal Adjustments	TOTAL <sup>(b)</sup> Population Estimates	% Public Supply	% DSS
Region I	324,458	10,383	334,841	94%	6%
Region II	483,056	61,218	544,274	91%	9%
Region III	178,282	21,394	199,676	93%	7%
Region IV	113,005	3,445	116,450	36%	64%
Region V	27,188	8,083	35,271	86%	14%
Region VI	43,813	1,052	44,865	70%	30%
Region VII <sup>(a)</sup>	340,528	3,556	344,084	86%	14%
TOTALS	1,510,330	109,129	1,619,459	86%	14%

<sup>(a)</sup> Estimated NWFWMD share of Jefferson County only.

<sup>(b)</sup> Total population estimates, including seasonal adjustments.

Primary groundwater resources in northwest Florida are the Floridan and sand-and-gravel aquifers. Minor or "miscellaneous" aquifer systems include the intermediate, Claiborne, and surficial aquifers. A major surface water resource for Bay County is the Deer Point Lake Reservoir.

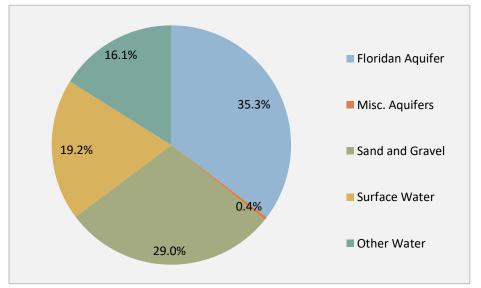


Figure 2. Total Water Use by Source

Withdrawals from the Floridan aquifer accounted for 35 percent of all water use and over half of all groundwater withdrawals. "Other Water" is estimated water use but the source is not clearly known or identified.

#### 2021 Estimated Water Use

Planning Region / County or Counties	Water Use (mgd)	
Region I. Escambia	80.16	
<b>Region II</b> . Okaloosa, Santa Rosa, Walton	75.30	
Region III. Bay	59.02	
<b>Region IV</b> . Calhoun, Holmes, Jackson, Liberty, Washington,	51.91	
Region V. Franklin, Gulf	5.71	
Region VI. Gadsden	10.95	
<b>Region VII</b> . Leon, Wakulla, Jefferson (NWF)	46.79	
TOTAL	329.83	

Ninety-one (91) percent of all public supply water use was in Bay, Escambia, Leon, Okaloosa, Santa Rosa, and Walton counties.

Agriculture and recreation are the two water use categories most affected by precipitation and drought. Annual average rainfall in 2021 was 72 inches, 18% above normal. The most recent drought year was 2011.

> Northwest Florida Water Management District

> > TRS-23-2

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