

Total estimated water use: about 334 mgd

Population estimates:1

- BEBR 1,465,835
- With seasonal adjustments - 1,561,467

Public supply per capita:

- Gross 125 gpcd
- Residential 75 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)

2019 Estimated Water Use

in the

Northwest Florida Water Management District

Estimated water use is the foundational data for Northwest Florida Water Management District (NWFWMD or District) water supply assessments, regional water supply plans, groundwater models and MFL technical assessments, and for consumptive use permitting. Existing water use is the baseline data to develop water demand projections and future reasonable-beneficial water use needs. The 2019 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>Agriculture</u> estimates of reported pumpage, and total estimates from FDACS/FSAID data;
- 4. <u>Recreational irrigation</u> estimates of reported pumpage, and total estimates including water use from GWUP wells;
- 5. Industrial-Commercial-Institutional (ICI) net adjusted water use; and,
- 6. Thermoelectric power generation net adjusted water use.

In 2019, the total estimated District water use was about 334 mgd. Half or about 168 mgd was in the public supply water use category. ICI is the second largest water use category followed by agriculture.

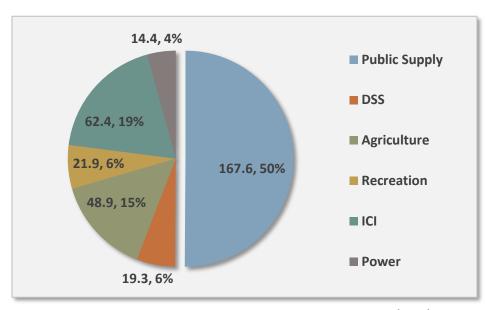


Figure 1. NWFWMD Total Water Use 2019 by Category (mgd)

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 and the majority (86%) of ICI and power generation self-supplied water use was in Escambia and Bay counties.

¹ NWFWMD portion of Jefferson County only.

The District's sixteen counties are organized into seven water supply planning regions. Escambia County (Region I) accounted for one-fourth of all District estimated water use in 2019, about 83 mgd. Rapidly growing and developing Region II followed with about 76 mgd or 23 percent. Bay County (Region III) is the District's third largest water user at 59 mgd or 18 percent.

Population estimates with seasonal adjustments total 1,561,467. 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 2015-2019 was 123.5 gpcd.

2019 Population Estimates

REGION	BEBR Permanent Populations	Seasonal Adjustments	TOTAL ^(b) Population Estimates	Public Supply	Domestic Self- Supply
Region I	321,134	10,276	331,410	314,179	17,231
Region II	450,639	56,052	506,691	473,314	33,377
Region III	167,283	13,450	180,733	164,849	15,884
Region IV	115,244	3,583	118,827	40,571	78,256
Region V	25,355	7,665	33,020	29,831	3,189
Region VI	46,277	1,111	47,388	30,430	16,958
Region VII ^(a)	339,903	3,496	343,399	290,776	52,622
TOTALS	1,465,835	95,632	1,561,467	1,343,950	217,517

⁽a) Estimated NWFWMD share of Jefferson County only.

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. A major surface water resource is Deer Point Lake Reservoir in Bay County.

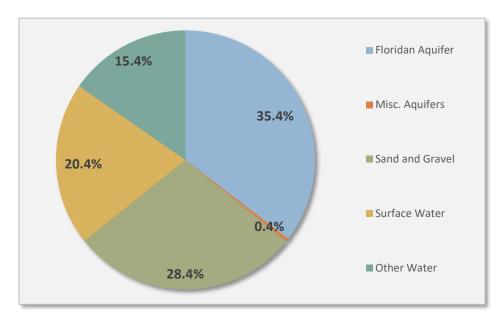


Figure 2. NWFWMD 2019 Water Use by Water Source

Withdrawals from the Floridan aquifer accounted for 35 percent of all 2019 water use and over half of all groundwater withdrawals. "Other Water" is estimated water use but the source is not clearly known or identified.

2019 Estimated Water Use

Planning Region / County or Counties	Water Use (mgd)
Region I. Escambia	82.77
Region II. Santa Rosa, Okaloosa, Walton	76.07
Region III. Bay	58.68
Region IV . Washington, Holmes, Jackson, Calhoun, Liberty	52.27
Region V. Gulf, Franklin	4.99
Region VI. Gadsden	12.41
Region VII. Leon, Wakulla, Jefferson (NWF)	47.21
TOTAL	334.40

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

Agriculture and recreation are the two water use categories most affected by precipitation and drought. Annual average rainfall in 2019 was 50 inches, about 18% below normal. The most recent drought year was 2011.

Northwest Florida Water Management District

TRS-21-1

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⁽b) Total population estimates, including seasonal adjustments.