2024 Estimated Water Use

in the

Northwest Florida Water Management District

Total estimated water use: 325.1 mgd

Population estimates:[1]

- ***BEBR - 1,593,367***
- ***With seasonal adjustments - 1,710,275***

Public supply per capita:

- ***Gross - 123 gpcd***
- ***Residential - 68 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)

[1] NWFWMD portion of Jefferson County only.

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 provides the baseline data to develop water demand projections. The 2024 water use estimates include:

1. Public supply utility production withdrawals, water transfers, water demand, population estimates, and per capita rates;
2. Domestic self-supply (DSS) estimates based on estimated populations and a USGS per capita rate of 82.30 gpcd;
3. Agriculture estimates of reported pumpage, and total estimates from FDACS/FSAID data;
4. Recreation, including golf course and landscape irrigation, and water-based recreation based on reported and estimated pumpage;
5. Industrial-Commercial-Institutional (ICI) reported water use; and,
6. Thermoelectric power generation reported water use.

In 2024, the estimated District water use totaled 325.1 mgd. Approximately half, or 182.5 mgd, was in the public supply water use category. Agriculture was the second largest water use category followed by ICI.

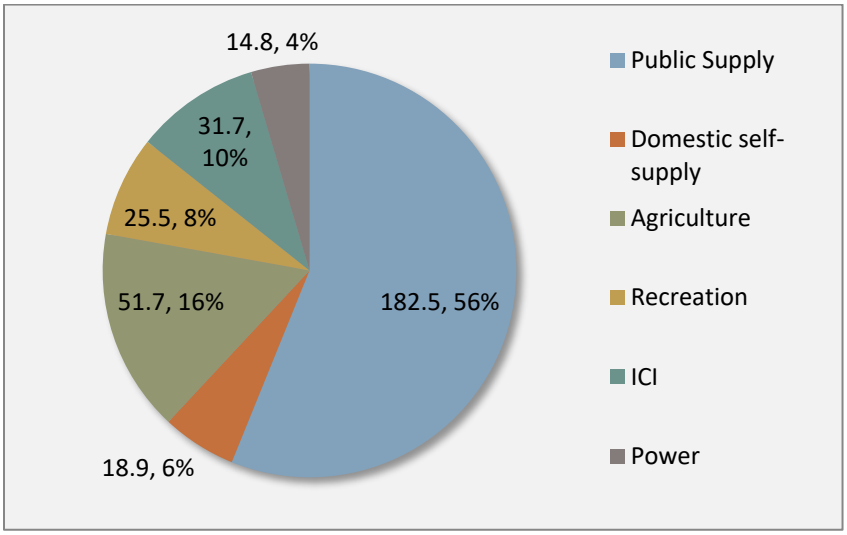


Figure 1. Total Water Use by Category (mgd)

Agriculture continues to be the largest water use category in Jackson County and in Region IV. More than half of all recreation water use was in Region II, the majority of ICI water use was in region I (66%), and most power generation water use occurred in regions I (54%), III (26%), and VII (18%).

The District's 16 counties are organized into seven water supply planning regions. Rapidly growing and developing Region II accounted for 84.62 mgd, or 26 percent, of water use. Escambia County (Region I) accounted for nearly one-fourth (78.45 mgd) of all District water in 2024. Region IV had the District's third largest water use at 53.02 mgd, or 16 percent.

Population estimates with seasonal adjustments total 1,712,146. Seasonal residents are estimated to affect both public supply and DSS water use in all sixteen counties. Approximately 87 percent of District residents are estimated to be served by public supply utilities. The five-year average gross public supply per capita water use rate from 2020 to 2024 was 121.44 gpcd.

2024 Population Estimates

REGION	BEBR Permanent Populations	Seasonal Adjustments	TOTAL[(b)] Population Estimates	% Public Supply	% DSS
Region I	336,358	10,763	347,121	94%	6%
Region II	517,517	67,109	584,626	96%	4%
Region III	196,112	23,533	219,645	85%	15%
Region IV	117,688	3,610	121,299	35%	65%
Region V	30,268	8,924	39,192	93%	7%
Region VI	44,853	1,076	45,929	71%	29%
Region VII[(a)]	350,571	3,764	354,335	85%	15%
TOTALS	**1,593,367**	**118,780**	**1,712,148**	**87%**	**13%**

[(a)] Estimated NWFWMD share of Jefferson County only.
[(b)] Total population estimates, including seasonal adjustments.

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

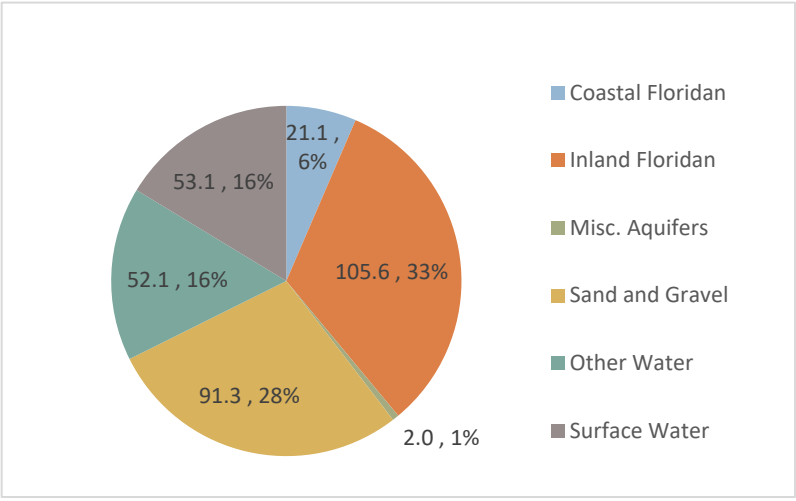


Figure 2. Total Water Use by Source

Withdrawals from the Floridan aquifer accounted for 40 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.

2024 Estimated Water Use

Planning Region / County or Counties	Water Use (mgd)
Region I. Escambia	**78.45**
Region II. Okaloosa, Santa Rosa, Walton	**84.62**
Region III. Bay	**44.82**
Region IV. Calhoun, Holmes, Jackson, Liberty, Washington,	**53.02**
Region V. Franklin, Gulf	**5.92**
Region VI. Gadsden	**10.73**
Region VII. Leon, Wakulla, Jefferson (NWF)	**47.59**
TOTAL	**325.14**

Eighty-nine (89) 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 2024 was 66.33 inches, roughly normal.

Northwest Florida Water Management District

TRS-26-2

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