



2020 Estimated Water Use

in the

Northwest Florida Water Management District

Total estimated water use: about 340 mgd

Population estimates:¹

- **BEBR - 1,492,875**
- **With seasonal adjustments - 1,598,918**

Public supply per capita:

- **Gross - 123 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)

Estimated water use is foundational data for Northwest Florida Water Management District (NFWMD 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 2020 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 population estimates and a USGS per capita rate of 88.67 gpcd;
3. Agricultural estimates of reported pumpage, and total estimates from FDACS/FSAID data;
4. Recreational irrigation, including landscape irrigation, based on reported and estimated pumpage;
5. Industrial-Commercial-Institutional (ICI) reported water use; and,
6. Thermoelectric power generation reported water use.

In 2020, the total estimated District water use was about 340 mgd. Half or approximately 171.6 mgd was in the public supply water use category. ICI is the second largest water use category followed by agriculture.

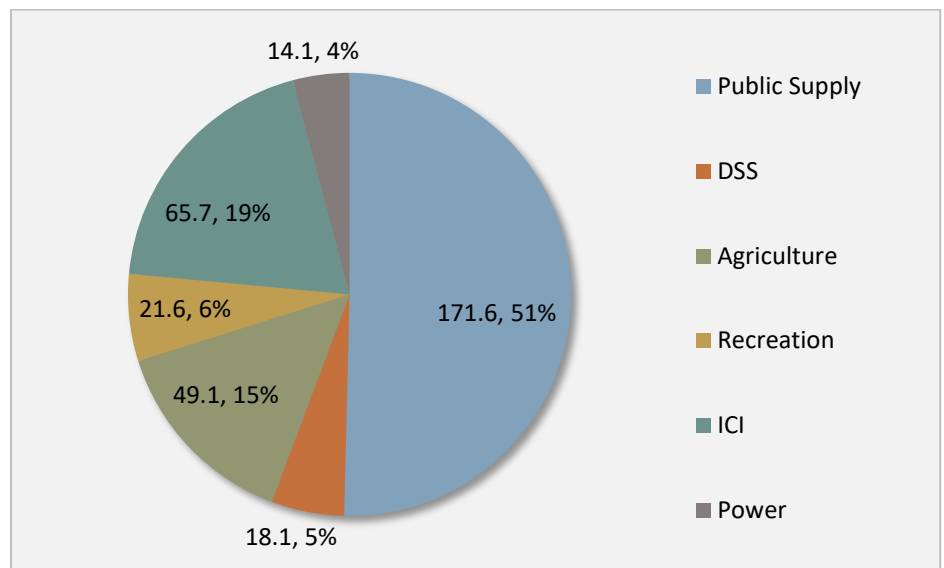


Figure 1. NFWMD Total Water Use 2020 by Category (mgd)

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 of ICI and power generation self-supplied water use was in Escambia and Bay counties.

¹ NFWMD 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 used nearly one-fourth of all District water in 2020, about 83 mgd. Rapidly growing and developing Region II followed with about 76 mgd or 22 percent. Bay County (Region III) is the District’s third largest water user at 64 mgd or 19 percent.

Population estimates with seasonal adjustments total 1,598,918. 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. The five-year average gross public supply per capita water use rate from 2016-2020 was 122.3 gpcd.

2020 Population Estimates

| REGION | BEER Permanent Populations | Seasonal Adjustments | TOTAL ^(b) Population Estimates | % Public Supply | % DSS |
|---------------------------|----------------------------|----------------------|---|-----------------|------------|
| Region I | 323,714 | 10,359 | 334,073 | 94% | 6% |
| Region II | 463,328 | 58,663 | 521,991 | 95% | 5% |
| Region III | 174,410 | 20,929 | 195,339 | 95% | 5% |
| Region IV | 114,986 | 3,564 | 118,550 | 36% | 64% |
| Region V | 26,588 | 7,866 | 34,454 | 88% | 12% |
| Region VI | 46,226 | 1,109 | 47,335 | 67% | 33% |
| Region VII ^(a) | 343,623 | 3,552 | 347,175 | 85% | 15% |
| TOTALS | 1,492,875 | 106,043 | 1,598,918 | 87% | 13% |

^(a) Estimated NFWFMD 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 or “miscellaneous” aquifer systems include the intermediate, Claiborne, and surficial. A major surface water resource is Deer Point Lake Reservoir in Bay County.

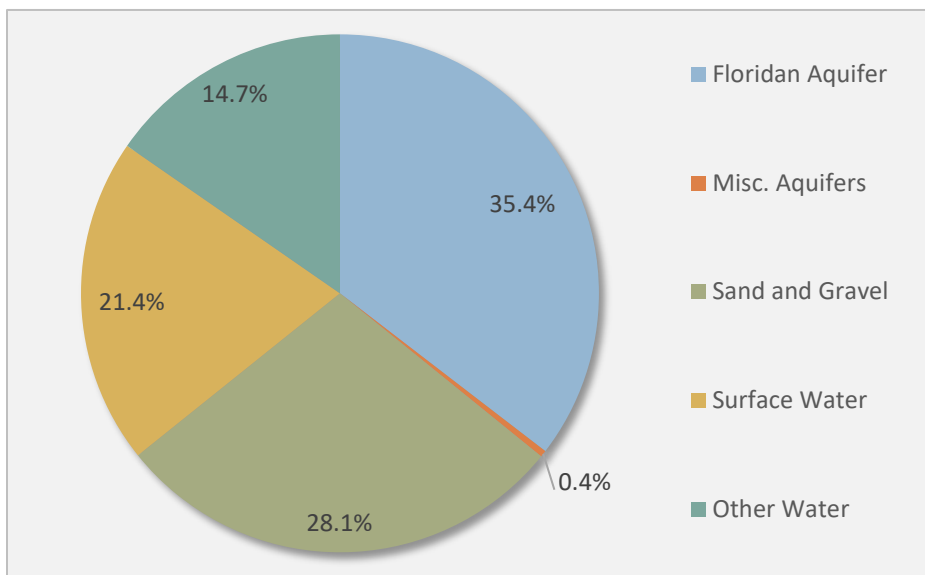


Figure 2. NFWFMD 2020 Water Use by Water Source

Withdrawals from the Floridan aquifer accounted for 35 percent of all 2020 water use and over half of all groundwater withdrawals. “Other Water” is estimated water use but the source is not clearly known or identified.

2020 Estimated Water Use

| Planning Region / County or Counties | Water Use (mgd) |
|--|-----------------|
| Region I. Escambia | 82.72 |
| Region II. Santa Rosa, Okaloosa, Walton | 76.13 |
| Region III. Bay | 63.89 |
| Region IV. Washington, Holmes, Jackson, Calhoun, Liberty | 51.92 |
| Region V. Gulf, Franklin | 5.12 |
| Region VI. Gadsden | 12.25 |
| Region VII. Leon, Wakulla, Jefferson (NWF) | 48.21 |
| TOTAL | 340.24 |

Ninety (90) 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 2020 was 66 inches, about 7% above normal. The most recent drought year was 2011.

Northwest Florida Water Management District

TRS-22-1

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