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Water Resource Fact Sheet Series

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For More Information

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Water Use Trends in Florida

Florida faces many challenges in meeting future demands for water. Public water supply is expected to increase significantly over the next 20 years, and inexpensively treated potable groundwater supplies are becoming more limited in many parts of the state. With Florida predicted to become the third largest state in the nation by 2030, understanding past and estimated future water uses and trends is necessary if future water demands are to be met in ways that are sustainable over the long term.

What Is Known About Historical Fresh Water Use?

Florida's historical water use is well documented. The Florida Department of Environmental Protection (DEP), the US Geological Survey (USGS), and the state's five water management districts collect and analyze water use data at the state, regional and local levels. The water management districts are required by law to prepare Regional Water Supply Plans (RWSPs) that analyze trends and estimate future fresh water demands over a 20-year planning horizon. The most recent RWSPs cover the period from 2005 through 2025. In 2010, the districts will update their RWSPs and include new demand projections through 2030. These plans are posted on the individual district websites. The DEP summarizes progress implementing these plans each year in the Annual Status Report on Regional Water Supply Planning: <http://www.dep.state.fl.us/water/waterpolicy/docs/sustaining-our-water-resources.pdf>.

Where Do We Get Our Water?

Until 1980, surface water was the largest source of fresh water in Florida. After 1980, groundwater became the largest source of fresh water in Florida. In the future, groundwater withdrawals are expected to level off as this source reaches its sustainable limit. New demand will increasingly be met by alternative sources such as brackish groundwater, surface water, desalinated seawater, stormwater, and reclaimed water.

Who Are Florida's Largest Water Users?

Since 1980, the two largest uses of water in Florida have been agriculture and public supply, which account for about 80% of all water use. Agriculture has historically used more water than public supply, but public supply has steadily gained on agriculture as the population has grown. Between 1975 and 2005, the population served by public water systems more than doubled from 6.8 million to 16.1 million people. Withdrawals for public supply increased from 1.1 billion gallons per day (bgd) to 2.7 bgd during this period.

Agriculture, though still the largest use, has not increased much due to decreases in irrigated acreage, improved conservation methods, better management practices, and water use restrictions during droughts.

What Do We Know About Future Demand?

The demand projections in the most recent water management district Regional Water Supply Plans indicate water use will continue to increase over the next 20 years. Between 2005 and 2025, public supply is expected to increase by about 43% and account for the majority of the increase in statewide demand. Agricultural irrigation will increase by about 6%, and will represent the second largest water use. The other water use sectors show small increasing trends as well. Total water withdrawals for all uses are expected to increase by about 1.8 bgd.

Analyses conducted by the water management districts indicate that groundwater resources are insufficient to fully meet future demands in large areas of the state. To do so would result in unacceptable environmental impacts including saltwater intrusion, reduction in spring flows, lowered lake levels, and loss of wetlands. Consequently, steps are being taken now, and future actions planned, to reduce the state’s reliance on fresh groundwater.

Conclusions

Water use in Florida is increasing at a rate that cannot be met using traditional, inexpensively treated groundwater. Historical trends and future projections show public water supply and agriculture as the two largest users of water through 2025. Projections through 2030, currently being developed, are expected to show this trend continuing. Florida’s plans to meet future demands call for increased conservation, development of alternative sources to supplement groundwater, and increased use of stormwater and reclaimed water.

Current and Projected Future Fresh Water Use

