

look for



Saving Water in

Florida

Florida is surrounded by water and is home to the second largest freshwater lake wholly contained within the United States, Lake Okeechobee. Natural beauty and warm temperatures attract a large population; Florida is the nation's fourth most populous state, with the number of residents continuing to rise.

By 2030, Florida's demand for fresh water is estimated to increase by about 28 percent compared to 2005 levels, and traditional sources of ground water will be unable to meet this new demand. But Florida water management districts have developed plans to handle this new demand and more. Floridians can also help reduce the burden on community water infrastructure and treatment costs by using water more efficiently, because using water more efficiently can be cheaper than finding new sources of water.

REDUCING THE BURDEN ON AQUIFERS

Ground water has traditionally been the primary water supply source in many areas of the state; making Florida the largest user of ground water east of the Mississippi River. For example, in 2005, the Floridian aquifer system supplied nearly 53 percent of the total public water supply withdrawals for the state and served an estimated 8.1 million people. Withdrawing water from aquifers can be problematic, however, depending upon how much is removed. Recent concerns have arisen in the Daytona Beach area because excessive withdrawals could destroy the wetlands and lakes in the Tiger Bay State Forest. And with a population growth rate of more than 26 percent since 2000, Orlando has significantly increased its dependence upon the Floridian aquifer and is reaching the limit of sustainable withdrawals.

Overall population growth in the state has slowed from previous predictions but is still projected to continue, which will create new demand on groundwater sources that are nearing their sustainable limits. The



development of alternative water supplies, as well as water efficiency efforts, will therefore be essential in meeting future demands.

WATCHING THE WEATHER FOR IMPACTS

Climate change impacts are also expected to challenge Florida's future water supply. Variations in either annual rainfall or temperatures could pose risks to the state's water resources. Extended droughts and heat waves, for example, could further limit the amount of water that reaches Florida's aquifers, and rising sea levels and coastal storms could increase the threat of saltwater intrusion into freshwater aquifers. Municipalities are adopting measures such as watering restrictions designed to help reduce the impacts of droughts.

The famous Everglades have also been affected by recent droughts. The water level in Lake Okeechobee, considered the heart of the Everglades, dropped so low during the 2011 drought that gravity couldn't pull

the water south to the Everglades or through the canal that provides West Palm Beach with its drinking water. Given the potential for such extreme water shortages, using water wisely has become especially important.

REDUCING USE

With demand for public water supplies in Florida projected to increase nearly 50 percent by 2030, Floridians are starting to make changes to help save water, starting in their own back yards. On average, Americans use an average of 30 percent of their water outdoors. Residential water use per person in Florida has declined since 2000, as a result of water conservation efforts, water restrictions, the increased use of reclaimed water, and “Florida-Friendly” landscaping techniques. Florida-Friendly landscapes include water-efficient irrigation, low water-using plants, and reduced stormwater runoff, which can transport harmful chemicals. By watering lawns and gardens more efficiently, Florida residents could save 46 million gallons of water each day—equal to the amount needed to supply every household in Tampa.

Utilities, cities, and water management districts across Florida are promoting water efficiency inside the home as well, providing technical assistance and offering rebates on products labeled by the U.S. Environmental Protection Agency’s (EPA’s) WaterSense® program. If just half of Florida’s households replaced their older, inefficient toilets with WaterSense labeled models, the state could save nearly 38 billion gallons of water annually—enough to supply every household in Orlando for four years.

Some builders are taking this approach to heart and installing WaterSense labeled fixtures throughout community developments. For example, it is estimated that homes featuring WaterSense labeled fixtures in the Brownsville Transit Village in Miami will save more than 5 million gallons of water per year and about \$50,000 annually in utility savings, compared to using standard plumbing fixtures.

For more information on WaterSense labeled products and new homes, or other water-saving tips, visit www.epa.gov/watersense.

New Homes, Less Water Stewart Style



Although population growth can strain water supplies, the new homes built to house Florida’s growing population can be much more water-efficient than older models, especially if they earn the WaterSense label. National homebuilder KB Homes, the first WaterSense Builder Partner of the Year, has built a number of WaterSense labeled new homes near Orlando, Florida.

To demonstrate how these homes can have beautiful landscapes that use less water, KB Homes teamed up with design maven Martha Stewart to design a net-zero energy, water-saving concept home located just outside of Orlando. The home features WaterSense labeled plumbing fixtures and a beautiful, water-efficient landscape comprised of regionally appropriate plants. A rainwater collection system is also included.

(Photo: c. 2010 James F. Wilson/Courtesy Builder Magazine)