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Water Resource Fact Sheet Series

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For More Information

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Drought and Water Management

In Florida, drought is a recurring event. A drought may be short lived, or it may last multiple years. A drought may be a minor inconvenience, or it can cause major water shortages resulting in crop failures, wildfires, damaged lawns and landscapes, environmental harm, and unpopular restrictions on water use. During periods of normal rainfall, most people think very little about the next drought or how to prepare for it. This fact sheet details Florida's approach to drought management and explains how everyone can be better prepared for the next drought.

How Common Are Droughts in Florida?

Even though average annual rainfall in Florida is 54 inches, it is not evenly distributed and has some unusual characteristics that tend to produce periods of water shortages. Major statewide or regional droughts occurred in recent decades, including the early 1970s, the early 1980s, in 1989-1990, again in 1999-2001, and most recently in 2006-2008.

Why Don't We Just Build More Water Supplies?

Developing additional water supplies is part of the solution, but it is not feasible to build enough water facilities to meet total water demand in a severe drought. It would cost too much and result in infrastructure that would not be needed most of the time. A better solution, and the one Florida has chosen, is a combination of actions to make our state less vulnerable to the effects of drought, and short-term measures to be implemented when drought occurs.

What Is Florida's Approach to Drought Management?

In Florida, experience with past droughts has led to an approach that has proven to be effective at meeting most needs, even in severe and prolonged droughts. This approach has several elements, including conservation, water shortage regulations, water supply planning, and source diversification.

Permanent, year-round water conservation is essential to help withstand severe droughts. In general, people do not conserve water nearly as well as they should during times of normal rainfall. Florida's water management districts have developed educational programs and, in some cases, year-round restrictions on certain water uses to encourage Floridians to conserve.

When normal conservation is not enough, the districts may issue water shortage orders. These orders impose additional temporary restrictions on the use of water until the shortage is over. In some cases, these measures are inconvenient, or even costly, but they are imposed to ensure that sufficient water is available to meet essential needs.

Water supply planning is another key element of Florida's approach. Florida law requires the water management districts to identify adequate water sources to meet current and projected future demands for a 20-year period, including demands in a 1-in-10 year drought. This helps ensure that Floridians have sufficient water to meet their needs even in a moderate drought. As fresh, easily treated groundwater has begun to reach its limits as a sustainable source of supply in many parts of the state, the water management districts are promoting the development of "alternative" water supplies. These alternative supplies include brackish groundwater, surface water, reclaimed wastewater and stormwater, and desalinated seawater. By diversifying our supply to include multiple sources, we protect against the risks of relying on a single source that could be compromised during a prolonged drought. In addition, some sources, such as desalination of seawater, are essentially unaffected by drought.

Another means of diversification that has been applied successfully in some parts of the state is regional utility interconnections. When utilities connect to each other within a larger region (a county, or multi-county area), they gain the ability to share water resources across the region and lessen the effects of drought.

How Can We Reduce the Consequences of Drought?

During past droughts, many Floridians had concerns with damage to lawns and landscapes due to watering restrictions. Unfortunately, past access to virtually unlimited fresh water and a desire for lush landscapes led many to landscape with plants that do not thrive well in Florida's climate without a lot of supplemental watering. Also unfortunate is that most irrigating is done with potable water. This means that during a drought, when irrigation is restricted to preserve potable supplies, water guzzling lawns and landscapes can be damaged if the level of irrigation allowed is less than they need.

The single most effective way to reduce your landscape's susceptibility to the effects of drought (and your contribution to the problems associated with drought) is to landscape with plants that do not need, or rarely need, supplemental irrigation to thrive in Florida's climate. Information on Florida-Friendly landscaping can be found at: <http://www.floridayards.org/>. If you cannot change your current landscape, make it more drought-tolerant by watering only when the plants must have supplemental water to survive. Infrequent watering causes plants to develop deep root systems that make them able to survive longer without watering. If you have an automatic irrigation system, make sure your rain sensor or soil moisture sensor (required by law) is properly installed and operating.

Another important action is to conserve water wherever you can indoors. Fix leaks, install WaterSense labeled plumbing fixtures, and buy efficient dishwashers, clothes washers, and water heaters. See the Water Conservation Fact Sheet in this series for additional ideas.