Florida *Green School Designation* Program Best Management Practice

Water Conservation





Water conservation is a significant environmental challenge faced by Floridians. It is a precious

commodity that Florida's tourism and industry depend on for economic viability. In Florida, most of the drinking water comes from groundwater aquifers that are replenished by rainfall.

Schools use tremendous amounts of water every day, and require water for their heating and cooling systems, restrooms, drinking water fountains, locker rooms, cafeteria, laboratories, and outdoor playing fields and lawns. Protecting the environment by lessening the impact a school has on the environment will alleviate the impact on our natural resources, the beautiful beaches, rivers, springs, and lakes.



Water conservation can be achieved through behavioral, operational, and equipment Best Management Practices (BMPs).

Behavioral and Operational Water Conservation Best Management Practices

Develop, commit to, and publicize the facility's plan to conserve water: The best plans are often those that have been soundly developed, have management, parent and student buy-in and are widely publicized to faculty and staff, students and the general public. The water conservation plan should include areas of concern, specific action-based goals and detailed plan to achieve success.

Remind students, faculty and staff, and employees to use water only when needed: It may seem simple to only use water when needed, but large amounts of water are wasted during simple activities such as teeth brushing, hand washing and shampooing.

Regularly track both water and sewage use: It is important to track and monitor all types of water usage, including sewage rates. An operational water-use tracking program will allow the facility to monitor for unusual variations. It is imperative that once variations are detected, the issue is resolved as soon as possible. Not only will water be conserved but the impact to the bottom line will be reduced.

Establishing a water efficiency plan from collected data is one method to prevent water waste. Knowing how water is used, how much is used, and its costs offers an understanding of which areas of water waste are causes for the most concern. The data collected can be used to create plots to track water usage daily and measure significant use each season to determine how outside temperatures affect water usage.

Conduct a water use assessment: Water assessments can be arranged from the local utility company or water management district. Contact the facility's water utility provider to arrange for an assessment. Most assessments are offered at no charge to the customer and can help identify ways

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to conserve water. The assessor may be able to offer information on monetary rebates or incentive programs to assist in any equipment or operational changes that may need to be made.

Install soil moisture or rain sensor on landscape irrigation systems: Installing soil moisture meters

or rain sensors will allow the school grounds to be irrigated only when needed. Soil meters sense the amount of moisture in the soil and will indicate when the moisture level reaches a certain threshold. Rain sensors will automatically shut off the irrigation system if it begins to rain during the irrigation cycle.

Irrigate during the appropriate times: Do not irrigate during the heat of the day. Most of the water used during this time will evaporate before it can reach the soil zone. Set timers on the irrigation system to run either in the early morning or evening. Contact your local State of Florida extension service agent, IFAS Solutions for Your Life, for the best time to water in your location.

Use Florida Friendly Landscaping: Florida-friendly landscaping uses plants and grasses that are native to Florida or to areas that have a similar climate. To reduce the amount of watering needed, these plants should also have an increased level of drought tolerance.

Use recycled or reclaimed water to irrigate: Recycled or reclaimed water has been properly treated but not to potable standards. If available or allowed by local regulators, use reclaimed water to water lawns, shrubs, and flower beds.

Equipment Water Conservation Best Management Practices

Use preventative maintenance schedule for water consuming equipment, such as ice machines, water heaters, dishwashers, washing machines, boilers, and chillers: Preventative maintenance schedules can increase machine efficiencies, lower costs, and can lead to lower utility costs by correcting problems before they become larger issues. Regularly check for leaks and repair any problems as soon as possible. All equipment should be placed on a preventative maintenance schedule and any necessary records kept accordingly.

Install low-flow fixtures in restrooms, and shower areas:

The following is a listing of the appropriate use rates for low-flow fixtures in the above areas:

- Low-flow faucets should use no more than 1.5 gallons per minute. Ensure all faucets have low-flow aerators.
- Low-flow showerheads should consume no more than 2.0 gallons per minute.
- Low-flow toilets should not use more than 1.6 gallons per flush.