

Greater efficiency supports patient care.

Water Management – Exterior

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Description

Best practices for managing water consumption outside of the facility. A proper management system provides a method to utilize water efficiently and minimize waste. With irrigation water, some nonpotable sources can be used to save potable water for human consumption.

Project Talking Points

- Water is everywhere around us, but only 0.5% of the Earth's water is readily available fresh water.
- There are options to avoid using potable water from the meter for irrigation purposes.
- Water is a natural resource. With growing demand and reducing supply, efficient use will become more important and challenging in the future.
- Water costs typically involve sewer costs to drain the water. Some utilities allow for deduct meters, which do not reduce water consumption but can save budget on sewer costs.
- The EPA created WaterSense to label products that utilize water efficiently.
- Setting baselines, goals and strategies to reduce water consumption gives an organization the structure for success.

Benefits

- **Cost benefits:** A reduction of water can be directly reflected on the water bill. Saving water reduces both water and sewer costs on the bill, and sewer costs are often higher than water costs. Additionally, sewer deduct meters can help save sewer costs when water is used but not drained off of the property.
- Environmental benefits: As we reduce the amount of fresh water available, it becomes more vital to efficiently utilize water. This will help ensure future generations have access to clean water.



• **Social benefits:** Developing a water management program for your facility shows staff, patients and the public that you are committed to reducing your impact on the community's environment by operating more efficiently. Implementing a program like this improves your public image as a health care organization and, more importantly, improves public health by saving water. As a community leader, health care organizations implementing these program can inspire others to do their part at home.

Purchasing Considerations

- Use cost-effective tools like Microsoft Excel or ENERGY STAR Portfolio Manager to track water consumption.
- Identify WaterSense labeled products ensure an organization is purchasing waterefficient products.
- Install submeters in areas to isolate water use of major equipment to better understand where water is being consumed. This is a great option for irrigation water if not metered separately.

<u>How-To</u>

- 1. Determine which department or team is going to handle overall water management. Appropriate departments include environmental services, purchasing or facility management.
- 2. Gain leadership commitment to a water management program that can collaborate with your designated team.
- 3. Inventory all sources of water consumption outside of your facility and approximate share of water bill for major sources.
- 4. Track water consumption as granularly as the information allows. Utility bills are a great place to start to track water coming in to each meter. Submeters can allow breakouts of larger consumption sources such as sprinkler systems.
- 5. Identify opportunities to reduce exterior water use:
 - Plant native species and drought tolerant grasses that thrive in the climate in your region.
 - Understand your landscaping needs and water as needed, not on a fixed schedule that isn't required by your plant life.
 - Utilize weather- or soil-based controllers that turn sprinkler systems on off depending on weather forecasts or the amount of moisture in the soil.



- Utilize mulch where possible in gardens to help landscaping maintain water levels and avoid evaporation.
- Avoid using water to clean off driveways, sidewalks and walkways. Sweep these areas instead when possible.
- Deduct meters can be used in some regions to remove the sewer portion of the water costs used for irrigation. This may not reduce water use but can help save on the overall water costs.
- 6. Identify ways to use nonpotable water for irrigation water:
 - Greywater is an option in some locations and is a great option for irrigation. This service is usually metered separately and not charged sewer costs.
 - Stormwater can be captured in rain barrels or diverted using piping from gutters to water gardens on other landscaping areas.
- 7. Monitor water consumption numbers to track savings from initiatives and to identify increases that need to be investigated.
- 8. Create a plan for identifying potential leaks in the water system. This can be through increases in the utility consumption or during site walkthroughs. Even small leaks add up to significant water waste over time.
- 9. Develop goals for the water management program that are specific, measurable, achievable, realistic and timely.
- 10. Track your progress against a baseline to report on water and cost reductions.
- 11. Celebrate the success of your water management program and share results with staff and your community.

Energy Conservation Measures Synergies

- Greenhouse Gas Emissions Scope 3
- Selecting the Right Sustainability KPIs
- Water Management Interior

Resources

- <u>EPA WaterSense outdoors page</u> with access to WaterSense labeled products and water-saving tips.
- ENERGY STAR water consumption trends.
- Energy STAR Water Metric FAQs for helping benchmark water in Portfolio Manager.



• *National Geographic* article about potential concerns of limited water supply in the future.

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