

Fact Sheet on Reclaimed Water (Water Reuse)

What is reclaimed water?

Reclaimed water is a valuable alternative water supply in Florida.

Local government and private sanitary sewer systems collect wastewater from homes and businesses and transport it to a wastewater treatment facility where it is properly treated and managed or reused in an environmentally safe manner. Water that is reused is referred to as "reclaimed water". For decades, Floridians have safely used reclaimed water to irrigate lawns, landscaping, and golf courses; restore wetlands; recharge drinking water aquifers; prevent saltwater intrusion; and for other beneficial uses.

How does water reuse benefit the environment?

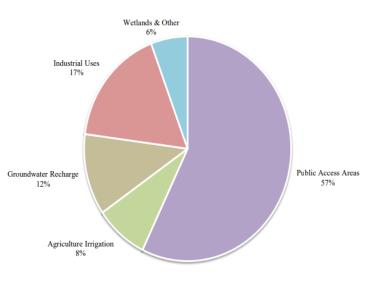
Water reuse is sustainable and conserves water resources.

Using reclaimed water for irrigation and industrial processes in place of groundwater or other water supplies, conserves groundwater and protects natural resources. In Florida, many communities use reclaimed water to help recharge groundwater sources and restore critical wetlands. Because reclaimed water naturally contains the nutrients plants need to grow, using reclaimed water to irrigate lawns, landcapes, and golf courses also reduces the need to apply additional fertilizer and thus, the amount of nutrients in the environment. As Florida's population continues to grow, the use of reclaimed water is an important way to help conserve and restore Florida's natural systems.

How is reclaimed water used in Florida?

Water reuse practices in Florida are as diverse as Key West is to Orlando and Pensacola is to Boca Raton. Florida's water reuse activities include:

- **Public Access Areas**: irrigation of golf courses, parks, and residential lawns and other landscaped areas as well as other urban uses such as toilet flushing and in decorative ponds and fountains
- Industrial Uses: use in processes & for cooling water
- **Groundwater Recharge**: recharging of groundwater sources using rapid infiltration basins, absorption fields and direct injection
- Agriculture Irrigation: irrigation of edible food crops, including citrus, corn, and soybeans; pasture lands, grasslands, and feed crops; and nursery irrigation
- Wetland: restoration & enhancement of wetlands



• Others: augmentation of surface waters

How much reclaimed water does Florida reuse?

Florida leads the nation in water reuse.

In 2019, a total of 476 wastewater treatment facilities in Florida provided reclaimed water for reuse. As a result, approximately 820 million gallons a day of reclaimed water was reused to irrigate 455,510 residences, 529 golf courses, 1,126 parks, and 394 schools. Approximately 8,543 acres of edible crops on 60 farms were also irrigated with reclaimed water. Florida achieves a per capita reuse rate of over 37 gallons per day, making Florida the nation's leader.

What factors determine the amount and type of reuse?

The various water reuse practices across Florida reflect the State's geographic, demographic, and environmental diversity.

Overall, water reuse is an important tool for helping communities meet water supply demands and protect the environment. The amount and types of reclaimed water use such as irrigation, aquifer recharge, power plant cooling, and wetland restoration varies between communities and is based on the opportunities and needs of each community. In determining which type, where, and when to implement reuse projects, factors such as water resource needs, local conditions, cost effectiveness, and environmental benefits are considered. For example, expanding reclaimed water systems for irrigation use in developing suburban areas where there is a higher water demand and the reclaimed water pipes can be installed in conjunction with the construction of the development is more practical and cost effective than expanding these systems in fully developed urban areas.

Can irrigation with reclaimed water harm surface waters?

Responsible reuse is safe, sustainable, and good for the environment.

Reclaimed water contains valuable nutrients that keep lawns and landscapes healthy. Using reclaimed water for irrigation reduces the need to use fertilizer on lawns and landscapes. Water reuse, however, must be responsible. Simply stated, overwatering is wasteful and potentially harmful to the environment, regardless of the water source. Most Florida turfgrasses only need up to one inch of water per week. Irrigation practices exceeding this amount may result in the reclaimed water and the nutrients contained therein to seep past the root zone and be lost. Likewise, irrigation nozzles should not spray reclaimed water onto impervious surfaces or into storm drains. It is all Floridians' responsibility to engage in reuse practices that achieve the desired environmental benefits.

What is the future of water reuse in Florida?

Existing reuse practices will continue to expand. Potable reuse is becoming economically viable.

Thanks to the sustained investment by Florida communities, the Florida Legislature, water management districts, and Florida Department of Environmental Protection (FDEP), consistent with the Environmental Protection Agency's (EPA) <u>National Water Reuse Action Plan</u>, the future is bright for water reuse in Florida. Current reuse practices continue to expand, and as newer and better treatment processes are being developed and Florida's water supplies become more strained, the use of reclaimed water for drinking water (i.e., potable reuse) is more attractive to communities. Potable reuse involves treating reclaimed water to meet stringent public health and environmental protection requirements and then using that water to supplement drinking water supplies. FDEP is currently developing regulatory programs for potable reuse. Communities evaluating potable reuse consider cost and feasibility, utilizing protective treatment requirements, concentrate disposal, and public education.