

# Collier County Reclaimed Water Factsheet

Collier County residents and businesses demand a constant supply of both potable and irrigation water to maintain our excellent quality of life here in Southwest Florida. However, we must balance these needs to ensure we can meet the needs for both current and future generations as Collier County grows each year. Reclaimed water has provided this balance to reduce the demand on potable water systems. Reclaimed water is treated wastewater which meets the regulatory standards for beneficial use for irrigation, groundwater recharge and industrial purposes. This green water solution has been used in the United States for over 100 years. The use of reclaimed water reduces the stress on groundwater and surface water sources, provides economic benefits by reducing the need to expand water systems, and eliminates the need to discharge wastewater to surface water ecosystems.\*



The South Florida Water Management District and Florida Department of Environmental Protection both regulate the distribution and quality of reclaimed water. These entities require analytical testing and monitoring of Collier County’s reclaim system. Our reclaimed water is compliant with all Florida Department of Environmental Protection (FDEP) requirements. Collier County’s reuse water does inherently contain some levels of nitrogen and phosphorus compounds associated with fertilizer, as the water is treated through the wastewater system. The concentration of nitrogen and phosphorus in reclaimed water is dependent on the constituents of the influent (raw sewage) and the type of treatment process used. The Reuse Section provides to its customers information on the three-year average nitrogen concentration and phosphorus concentration in the treated reclaimed water produced at the North and South Water Reclamation Facilities (see **Table 1**). This concentration does not vary by more than a few percentage points over time. The nitrogen and phosphorus results are provided to help our reclaimed water customers adjust their fertilizer application appropriately to ensure continued compliance with our Friendly Fertilization Ordinance. In addition to improving compliance, reducing the amount of fertilizer used will save money on the purchase and application of fertilizer and decrease mowing costs.

<b>TABLE 1 – 3rd Quarter 2018 Averages of Nutrients in Collier County Reuse Water</b>		
	NCWRF (mg/L)	SCWRF (mg/L)
Average Total Nitrogen Concentration (TKN + NO2/NO3)	8.1	10.8
Average Phosphorus Concentration	1.8	1.5

\*Southwest Florida Water Management District – *Reclaimed\_Water\_lev2\_08-09*

**Before applying fertilizer to your landscaping**, please consider the amount of nitrogen and phosphorus already present in reclaimed water. Generally, applying reclaimed water at a rate of 1” per acre per week will provide approximately 2.7 pounds of nitrogen per 1000 ft<sup>2</sup> annually, which is 90% of the label limit for Bahia and Centipede grasses; and 50% of the limit for Saint Augustine and Zoysia grass. The same amount of reclaimed water would provide all the phosphorus needed for all the turfs.

Runoff from over fertilizing is a major source of pollution in waterways such as canals, streams and ponds and produce algal blooms and excessive aquatic weeds ultimately affecting the coastal ecology. When fertilizer is applied without consideration of the total concentrations of phosphorus and nitrogen, including those in the reclaimed water, you may expose your landscaping to an increased potential for disease and/or fungus, increase your fertilization costs, and impact your aquatic features. Some additional resources from the South Florida Water Management District and the University of Florida IFAS can be found below. If you have additional questions, please contact our Reuse Manager at 239-252-6251.

**RESOURCES:**

Fertilization Guidelines for Established Turf Grass Lawns in South Florida

Nitrogen Recommendations <b>Turf Grass Species</b>	<b>Pounds of Nitrogen per 1,000 ft<sup>2</sup> per year</b>
Bahia grass	2 - 4
Bermuda grass	5 -7
Centipede grass	2 - 3
St. Augustine grass	4 - 6
Zoysia grass	4 - 6

**South Florida Water Management District and FDEP Reference Materials:**

1. **FDEP Reuse Facts:** <https://floridadep.gov/water/domestic-wastewater/content/reuse-facts>
2. **FDEP Reuse Educational Materials:** <https://floridadep.gov/water/domestic-wastewater/content/reuse-educational-materials>
3. **Florida-Friendly Landscaping: Tips for the Home Gardener:** <https://www.sfwmd.gov/community-residents/florida-friendly-landscaping>
4. **WATERWISE – promote water conservation using XERiscape landscaping techniques:** [http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd\\_repository\\_pdf/ww0\\_waterwise\\_all.pdf](http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/ww0_waterwise_all.pdf)
5. **University of Florida IFAS Extension** – “Accounting for the Nutrients in Reclaimed Water for Landscape Irrigation” <http://edis.ifas.ufl.edu/ae449>