2016 Annual Agency Reuse Report: Florida Department of Environmental Protection

Water Reuse Program
Division of Water Resource Management
Florida Department of Environmental Protection
February 2017

Purpose

Section 403.0646, Florida Statutes (F.S.), which was enacted in 2004, requires all state agencies, state universities, and water management districts to use reclaimed water at their facilities to the greatest extent practicable. Further, Section 403.0645, F.S., requires all state agencies, state universities, and water management districts to submit Annual Agency Reuse Reports to the Secretary of the Department of Environmental Protection (DEP) by February 1 of each year.

This report was prepared in response to this statutory directive.

The DEP offices do not operate individual wastewater treatment facilities, but rather use the existing sanitary infrastructure provided by local communities. A significant portion of the administrative spaces used by the DEP are leased from private third-parties. These structures were constructed prior to DEP's occupancy and limited capital improvements supporting water reuse (e.g., landscape irrigation and toilet flushing). DEP has restricted ability to implement water reuse at our facilities because of these intrinsic limitations. The reuse statistics reported annually thus do not change significantly from year to year. Regardless, DEP will take advantage of reuse opportunities at their facilities as they arise. These opportunities should present themselves more frequently as the communities where DEP facilities are located engage in water reuse activities.

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Use of Reclaimed Water at DEP Offices and Facilities

In addition to its office space in Tallahassee, the DEP operates six district offices and three branch offices. An inventory of the DEP offices and their potential use of reclaimed water are presented in the Appendix. Currently, none of the DEP offices use reclaimed water. The DEP district office in Fort Myers is within the City of Fort Myers' general reclaimed water service area but reclaimed water service is not available at the DEP district office. A "dry" reclaimed water distribution line is adjacent to DEP's district office in Orlando. It is hoped that once the local utility initiates reclaimed water in these areas, that reclaimed water will be used for landscape irrigation at the buildings housing the district offices in Ft. Myers and Orlando. However, this has been the situation at these district offices for years. None of the DEP offices have on-site wastewater treatment facilities. Hence, all DEP offices are dependent on other utilities for future reclaimed water service.

The Coastal and Aquatic Managed Areas Program operates 12 facilities or offices across Florida. As shown in the Appendix, none of these facilities has reclaimed water available nor do they operate domestic wastewater treatment facilities. As a result, reclaimed water is not used at these facilities and there is little potential for use of reclaimed water at these sites.

Use of Reclaimed Water at State Parks

The DEP operates 161 state parks in one of the nation's largest and finest state park systems (twice voted "best" state park system). Mostly because of the rather remote locations of the state parks, reclaimed water service from local utilities is not available to any of them. DEP's Division of Recreation and Parks used to maintain a wastewater treatment plant at John Pennekamp Coral Reef State Park on North Key Largo in Monroe County which provided reclaimed water for flushing urinals and toilets at six different facilities in the park. This innovative water reuse system was in operation for over 3 years. However, in September 2010, the park converted to municipal central sewer and ended the use of its self-generated reclaimed water.

Future Efforts to Use Reclaimed Water at DEP Office Facilities

The DEP will strive to utilize reclaimed water to the extent practicable at our district, branch, and Tallahassee offices. Given that DEP does not operate domestic wastewater facilities at these offices, we are dependent on municipal and/or investor-owned utilities providing reclaimed water service within the vicinity of our offices. For our offices that are state owned, we will coordinate with the Department of Management Services to urge use of reclaimed water for landscape irrigation as well as for use in decorative water features and for toilet flushing. For our leased office space, we will coordinate with our landlords to urge use of reclaimed water, when reclaimed water is available.

Future Efforts to Use Reclaimed Water at State Parks

The DEP will strive to utilize reclaimed water to the extent practicable within the state park system. The DEP will continue to evaluate the potential for water reuse at other state parks for toilet flushing, fire protection, and other activities allowed by Chapter 62-610, Florida Administrative Code.

Promoting Water Reuse in Florida

Sections 403.064 and 373.250, F.S., establish the encouragement and promotion of water conservation and reuse as state objectives. In response to the reuse objectives, the DEP, in association with the water management districts and other state agencies, have implemented a comprehensive Water Reuse Program. Florida's Water Reuse Program has been recognized for excellence by the WateReuse Association in 2004 and by the U.S. Environmental Protection Agency in 1993, 1996, and 1999. In 2006, Florida's Water Reuse Program received the prestigious Water Efficiency Leadership Award from the U.S. Environmental Protection Agency.

The popularity of water reuse in Florida has grown rapidly since the mid-1980s and Florida is regarded as a national leader in water reuse. In 2015, reuse capacity in Florida totaled about 1,668 million gallons per day and about 738 million gallons per day of reclaimed water were used for a wide range of beneficial purposes (2).

The DEP's Water Reuse Program will continue to encourage and promote water reuse in Florida. The Water Reuse Program will continue to pursue strategies outlined in the 2003 *Reuse Strategies Report* (1), in an effort to increase the efficiency and effectiveness of water reuse to maximize the resulting water conservation and management benefits. This report contains an excellent summary of the Water Reuse Program. This report can be found on our water reuse webpage (www.dep.state.fl.us/water/reuse/flprog.htm).

Public Education Activities

The DEP recognizes the public education benefits associated with the use of reclaimed water at state facilities. Hence, as DEP implements water reuse at our office buildings and state parks, we will provide attractive and effective interpretive signage and displays. As other state agencies, state universities, and water management districts move to use reclaimed water, we will be pleased to provide assistance related to the content of educational materials and displays.

The DEP maintains a comprehensive water reuse webpage (www.dep.state.fl.us/water/reuse). Information related to the use of reclaimed water at state facilities is available on the water reuse webpage. Of course, this webpage will continue to be maintained and used as a means of disseminating information on water reuse.

The DEP also offers several other public education materials related to water reuse. As noted on the reuse webpage, these include:

- ◆ A short informational video that runs directly from the Water Reuse main page that was produced by DEP in conjunction with the www.ProtectingOurWaters.org project.
- A brochure on the reuse of reclaimed water.
- A DVD-formatted video introducing water reuse.
- A public service announcement dealing with water reuse that is suitable for airing on local television channels and is available for loan.

Coordination with Other Agencies

On November 4, 2015, the agency held a meeting of the Reuse Coordinating Group in Tallahassee. Representatives from the Northwest Florida, Southwest Florida, St. Johns River, and South Florida Water Management Districts as well as the Florida Department of Agriculture & Consumer Services attended through teleconference. It is the intent of this group to meet regularly to coordinate reuse related activities and to promote communication between the member agencies.

In addition, the Department maintains a webpage

(http://www.dep.state.fl.us/water/reuse/agencies.htm) in an effort to provide information about water reuse and the annual reporting requirements to state agencies, state universities, and water management districts. The current DEP Annual Agency Reuse Report is presented on this webpage along with a summary of the reports submitted by other state agencies, universities, and water management districts.

References

- 1. Reuse Coordinating Committee and the Water Conservation Initiative Water Reuse Work Group. <u>Water Reuse for Florida: Strategies for Effective Use of Reclaimed Water</u>. Tallahassee: DEP. 2003.
- 2. Florida Department of Environmental Protection. <u>2015 Reuse Inventory</u>. Tallahassee: DEP. 2016.

Appendix

DEP Offices and Facilities

DEP Offices

County (1)	Name of Facility (2)	Type of Facility (3)	Location (City) (4)	Reclaimed Water Available (5)	WWTP On Site (6)	Reclaimed Water Used (7)	Uses of Reclaimed Water (8)	Future Plans (9)	Owner (10)
Bay	NWD Branch	Office	Panama City	No	No	No	None	None	Leased
Charlotte	SD (Biology Laboratory)	Office	Punta Gorda	No	No	No	None	None	Leased
Duval	Northeast District	Office	Jacksonville	No	No	No	None	None	Leased
Escambia	Northwest District	Office	Pensacola	No	No	No	None	None	DMS
Highlands	SD Branch	Office	Sebring	No	No	No	None	None	Leased
Hillsborough	Southwest District	Office	Temple Terrace	No	No	No	None	None	Leased
Lee	South District	Office	Ft. Myers	Yes	No	No	None	Office is located within a reclaimed water service area. DEP continues to encourage Ft. Myers to provide service.	DMS
Leon	Douglas Bldg.	Office	Tallahassee	No	No	No	None	None ¹	DMS
Leon	Carr Bldg.	Office	Tallahassee	No	No	No	None	None	DMS
Leon	Bob Martinez Center	Office	Tallahassee	No	No	No	None	None	DMS

¹ City of Tallahassee has opened a new public access reuse facility at Tram Road; however, none of the DEP buildings are planned to be in the reclaimed water service area.

DEP Offices

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Leon	Lab Complex	Labs	Tallahassee	No	No	No	None	None	DMS
Leon	Florida Geologic Survey (Gunter Bldg.)	Office	Tallahassee	No	No	No	None	None	Board of Trustees
Monroe	SD Regional Service Center (Branch)	Office	Marathon	No	Yes ²	No	None	City of Marathon has tentative plans to build 7 new WWTPs, one of which may provide reuse to a golf course.	DMS
Orange	Central District	Office	Orlando	No	No	No	None	Possible future availability – a dry reclaimed water line from the Iron Bridge facility is nearby.	Leased
Palm Beach	Southeast District	Office	West Palm Beach	No	No	No	None	None	Leased

 $^{^2}$ Treatment plant is owned and operated by the County. It is a small system with no plans to upgrade for reuse other than having to meet the Keys standard by the 2010 deadline.

Coastal & Aquatic Managed Areas

County (1)	Name of Facility (2)	Type of Facility (3)	Location (City) (4)	Reclaimed Water Available (5)	WWTP On Site (6)	Reclaimed Water Used (7)	Uses of Reclaimed Water (8)	Future Plans (9)	Owner (10)
Collier	Rookery Bay ELC	Learning Facility, Offices	Naples/ Rookery Bay	No	No	No	None	None	DEP
Dade	Southeast Coral Conservation and Biscayne Bay Aquatic Preserve	Offices	Miami	No	No	No	None	None	Leased
Duval	NE Aquatic Preserves	Modular Office	Jacksonville	No	No	No	None	None	DEP
Flagler	GTMNERR Research Offices	Offices	Marineland	No	No	No	None	None	Leased
Franklin	ANERR ELC	Learning Facility, Offices	Eastpoint	No	No	No	None	None	DEP
Franklin	ANERR HQ	Offices	Eastpoint	No	No	No	None	None	DEP
Gulf	St. Joe ELC	Learning Facility	St. Joe	No	No	No	None	None	DEP
Lee	Estero Bay Aquatic Preserve	Office	Ft. Myers/ Estero Bay	No	No	No	None	None	DEP
Santa Rosa	NW Aquatic Preserves	Modular Office	Milton	No	No	No	None	None	DEP
Seminole	Wekiva Aquatic Preserve	Modular Offices	Sanford	No	No	No	None	None	DEP
St. Johns	GTMNERR ELC	Learning Facility, Offices	Ponte Vedra	No	No	No	None	None	DEP
St. Lucie	SE Aquatic Preserves	Modular Office	Ft. Pierce	No	No	No	None	None	DEP

Column Notes:

- (1) The county in which the facility or building is located.
- (2) Name of the facility.
- (3) Office, Park, or other short descriptor for the type of facility.
- (4) Name of the city in which the facility is located (or "rural").
- (5) Does a utility provide reclaimed water service in the vicinity of the facility?
- (6) Is there a domestic wastewater treatment facility located at the facility/site?
- (7) Is reclaimed water used at this facility/site?
- (8) If reclaimed water is used, the uses made (landscape irrigation, toilet flushing, ground water recharge, laundries, etc.).
- (9) Future plans for use of reclaimed water at this facility.
- (10) Note the owner of the facility (DMS, DEP, or other). "Leased" indicates that the facility is leased from a private entity.