



INDIAN RIVER COUNTY, FLORIDA DEPARTMENT OF UTILITY SERVICES

Date: October 24, 2018

To: Jason E. Brown, County Administrator

From: Vincent Burke, P.E., Director of Utility Services

Prepared By: Cindy Corrente, Utility Finance Manager
Eric Charest, Environmental Compliance Analyst
Arjuna Weragoda, P.E., Capital Projects Manager

Subject: Re-use Plan

DESCRIPTIONS AND CONDITIONS:

On October 24, 2018, the Indian River County Board of County Commissioners (BCC) requested staff to obtain more details and evaluate a potential pressurized re-use study for Indian River County.

ANALYSIS:

Indian River County has historically provided reclaimed water (a.k.a. re-use) to area golf courses for irrigation. Currently, the existing re-use pipe network is not pressurized. Most of the distribution of re-use is discharged to self-contained ponds via open ended pipes. The Florida Department of Environmental Protection (FDEP) prefers the wastewater effluent to be re-use over surface water discharge. However, the St. Johns River Water Management District (SJRWMD) prohibits the discharge of re-use into a storm water management facility with an outfall to surface waters. Therefore, developers currently requesting re-use will be required to construct an isolated pond/lake without a surface water outfall. The additional area required for an isolated pond to store re-use is an impact on the net available buildable space, which in turn could be a financial impact as well. If pressurized re-use is available for new development, then the requirement of an isolated pond/lake is removed, which can be enticing to a developer. But with pressurized re-use comes other requirements such as cross-connection control, inspections, testing, proper color coding, and advisory signs. The intention of a cross-connection control is to prevent the undesirable reversal in the flow of non-potable water or other substances through a cross-connection and into the piping of the public water system or consumer's potable water system. Typically, this is accomplished by a mechanical device called the backflow preventer, which requires inspection and testing to be performed annually by a state certified vendor. These requirements have an added cost to the home owner.

Indian River County Department of Utility Services (IRCDUS) has undertaken re-use studies in the past. One such study is the expansion of a pressurized re-use system to serve the Barrier Island. Although an evaluation of this area began seven years ago, the completion of that study was halted in 2012. As part of the recently executed capital improvement plan implementation outlined in the Reclaimed Water Franchise Agreement between the Town of Indian River Shores (Town) and Indian River County, it may be meaningful to reevaluate

options for expanding pressurized re-use to the Barrier Island. Please note that this will only address a portion of the County and not other areas.

Typically, the general practice when addressing future utility funding requirements to support an expansion of pressurized re-use countywide is for the utility to first identify the capital requirements and associated timetables through engineering studies, including a capital program funding feasibility study. The capital program funding feasibility study should identify appropriate funding sources for each project, availability of existing funds, and, if required, rate adjustments. Furthermore, in setting rates, it is important to understand the type of capital improvement to be funded (i.e. water, wastewater, reclaimed water, expansion, upgrade, replacement and renewal (R&R), or a combination), along with its impact on operations and operating and maintenance (O&M) expenses.

FUNDING:

Staff has budgeted funds for a detailed evaluation of wastewater effluent disposal and an expansion of the pressurized re-use system. Funds for the separate studies can be derived from the other professional services account in the operating fund. Operating funds are generated from water and sewer sales. Note that both proposals would be obtained utilizing the engineering firms that are a part of the 2018 Continuing Consulting Engineering Services Agreement for Professional Services and will be brought back to the BCC for review and approval.

RECOMMENDATION:

Staff recommends the Board of County Commissioners consider the following:

- Authorize staff to negotiate a cost proposal with one of the engineering firms in the 2018 Continuing Consulting Engineering Services Agreement for Professional Services for a detailed evaluation of a Re-use Master Plan. The evaluation is to include funding requirements, build out scenarios, land development regulation changes, regulatory compliance, sources of funding, timing and appropriate rate structure modifications and/or rate adjustments.
- Authorize staff to negotiate a cost proposal to determine the feasibility of a pressurized re-use system within the Barrier Island area, specifically along A1A south of CR-510.