



STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: City Council Regular Session **MEETING DATE:** February 21, 2023

FROM: Scott Schultz, Asst. Water Utilities Director

SUBJECT: City Council approval for staff to submit a Request for Inclusion to the Florida Department of Environmental Protection, Drinking Water State Revolving Fund, in the amount of \$1,500,000.00, for the design and permitting of the Magnolia Point Reclaimed Water Retrofit, to comply with Senate Bill 64, the Surface Water Discharge Elimination Act.

BACKGROUND

Excerpt from the November 2, 2021 Council discussion of SB64:

After unanimous passing in the Florida House and Senate, on July 6, 2021, the Governor signed Senate Bill 0064, the Surface Water Discharge Elimination Act. This bill requires utilities to eliminate surface water discharges from wastewater treatment plants. For the city, this means eliminating discharges to the St. Johns River. This has created a significant financial burden for utilities and their funding bodies (customers).

The Harbor Road WWTF discharges 145,000 gallons per day (annual average) of its 500,000 gallons per day (annual average) produced to the St. Johns River. The South WWTF discharges 300,000 gallons per day (100%) to the St. Johns River. Under current loading this means the city will have to find a non-surface water discharge point for 450,000 gallons per day. This amount will increase almost daily.

Upon completion of the new Harbor Road AWWTF (late 2022), an additional 46,000 gallons per day of reclaimed water will be distributed to the Black Creek Village and Edgewater Landing subdivisions reducing the amount of effluent needing a non-surface water discharge point to 400,000 gallons per day (not including any additional flows that may be generated).

The bill requires a plan for eliminating the surface water discharges be submitted to the Florida Department of Environmental Protection (FDEP) by November 1, 2021 (complete – attached). The discharges must be eliminated by 2032. There is a small allowance for wet-weather discharge.

There are limited options for where you can discharge wastewater effluent. An analysis of current available options / technologies was conducted. For example, due to limited land available in our city limits / wastewater service territory, the constantly increasing cost of that land due to the First Coast Expressway, and the poor percolation factor of the soils, land application (spray fields) is not feasible without moving outside of our service territory.

Deep well injection is another option. This would be drilling a large well very deep (well below the Floridan Aquifer) and injecting the wastewater effluent underground. Recent hydrologic modeling indicates this is very challenging west of the St. Johns River. Not that it can't be done, but it would require an extremely deep and costly well.

A third option is rapid infiltration basins. Large ponds that are designed to quickly percolate water into the soils. As mentioned in the spray field section above, due to poorly percolating soils in our area, a large space of land would be required, or movement outside of our service territory.

None of the methods above support the city's goal of reducing withdrawals from the Floridan Aquifer. The only option that accomplishes this goal is reclaimed water.

The attached Technical Memorandum is the document that was submitted to FDEP as required by the Rule.

After further consideration by staff, and discussion with FDEP, staff has concluded the retrofit of Magnolia Point with reclaimed water is the only viable option for meeting the requirements of SB64. The original estimate for the design and permitting was around \$900,000.00. Due to conditions in the current industry market, the Request for Inclusion will be for \$1,500,000.00. A copy of the Request for Inclusion is not attached as staff is still completing the document.

FISCAL IMPACT

Estimated Fiscal Impact will be \$1,500,000.00. All efforts (grants, etc.) will be taken to minimize financial impact. This item is budgeted in the approved FY 23 Reclaimed Water Department CIP Budget.

RECOMMENDATION

Approve staff to submit a Request for Inclusion (RFI) to the Florida Department of Environmental Protection, Drinking Water State Revolving Fund, in the amount of \$1,500,000.00, for the design and permitting of the Magnolia Point Reclaimed Water Retrofit, to comply with Senate Bill 64, the Surface Water Discharge Elimination Act and approve the City Manager or his designee to sign the RFI and all associated documentation needed to secure the loan.