

**Indian River County, Florida
Department of Utility Services
Board Memorandum**

Date: February 27, 2024

To: Indian River County Board of County Commissioners

Through: John A. Titkanich, Jr., County Administrator

From: Sean C. Lieske, Director of Utility Services

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Subject: Indian River County Department of Utility Services
One Water Pilot Project
Application for Funding from St Johns River Water Management District Cost-Share Program,
Water Research Foundation Tailored Collaboration Program, and Other Funding/Grants

Background:

Indian River County Department of Utility Services (IRCDUS) maintains three wastewater treatment facilities (WWTFs) in the county's South, West, and Central regions. Each facility satisfies the Florida Department of Environmental Protection's (FDEP) standards for advanced wastewater treatment (AWT) which produces reclaimed water that can be used for reuse purposes such as golf course irrigation.

IRCDUS recently completed a Reuse Master Plan that concluded that alternative disposal options during peak flows will need to be determined. Indirect potable reuse (IPR) and direct potable reuse (DPR) are viable solutions for IRCDUS due to the increasing stringency of regulations for surface disposal and the need for additional or new water sources to meet rising demand for drinking water production. IPR and DPR are augmentation of a drinking water source (surface water or groundwater) with reclaimed water that is followed by an environmental buffer (indirect) or not followed by an environmental buffer (direct) based on the treatment technology and process.

In response to the growth of Indian River County and increasing water quality requirements and restrictions on water consumption, IRCDUS has reviewed alternative methods of meeting these needs. Based on meeting the need for additional disposal option for reclaimed water while meeting the need for new water sources, IRCDUS wishes to undertake the One Water Pilot (OWP) Project, to examine the feasibility of IPR and DPR as an effective means of disposing treated wastewater effluent and/or boosting the water supply.

The OWP Project will commence with a feasibility study to evaluate the various technologies available (e.g., ozone, advanced oxidation processes, reverse osmosis, and critical water oxidation) and identify the most feasible option for implementation of IPR/DPR in Indian River County. Following the study, the pilot program will be conducted that will include the setup, operation, and testing of a temporary, small-scale IPR/DPR system at the West Regional WWTF for approximately eighteen (18) months. At project conclusion, it will be determined if IPR/DPR is a viable option for full-scale implementation within the IRCDUS water and wastewater system.

Analysis:

The total cost for the OWP Project is estimated at \$2,544,700.00, broken down as follows:

Project Phase	Amount
Phase 1 – Feasibility Study	\$ 248,800.00
Phase 2 – Piloting	\$ 2,295,900.00
Total	\$ 2,544,700.00

The Indian River County’s 2023 Capital Improvements Element (CIE) includes funds for the OWP Project (identified as “One Water Direct Potable Reuse Pilot” in the CIE) in the amounts of \$500,000.00 for FY 2024/25 and \$1,500,000.00 for FY 2025/26, for a total of \$2,000,000, which aligns with the schedule for the OWP Project implementation.

To cover the additional cost estimate of \$544,700.00 while seeking opportunities to offset the County’s costs, IRCDUS is actively seeking grants with funding requirements that align with the OWP Project objectives. Thus far, IRCDUS has identified two (2) grants: St Johns River Water Management District (SJRWMD) “Cost-Share Program” and Water Research Foundation (WRF) “Tailored Collaboration Program”. Both programs are geared towards innovative technologies that drive water conservation and have up to a fifty percent (50%) match.

Any amount of funding awarded by any grant/funding program may require an equal amount or more of IRCDUS funds. For example, based on the estimated cost of \$2,544,700.00 for the OWP Project and a 50% match, the lowest anticipated IRCDUS funding amount would be \$1,272,350.00, which may vary subject to the grantors’ award limits at the time of award. Should IRCDUS be successful in receiving any funding award for the OWP Project, a separate agenda item will be brought to the Board of County Commissioners at a future date with the funding plan and appropriate approval requests.

Both the SJRWMD Cost-Share and WRF Tailored Collaboration programs are currently accepting applications with submission deadlines of February 16, 2024, and June 3, 2024, respectively. To meet the already expired SJRWMD Cost-Share application, IRCDUS completed the online application and requested it to be placed on hold by the SJRWMD Cost-Share Project Manager pending confirmation from IRCDUS to proceed with final submission. An application for the WRF Tailored Collaboration Program has not yet been submitted.

Funding:

No funding is required for this item.

Recommendation:

Staff recommends that the Indian River County Board of County Commissioners approve the Department of Utility Services to proceed with submitting applications for the St Johns River Water Management District Cost-Share Program and Water Research Foundation Tailored Collaboration Program for the One Water Pilot Project, and further to submit additional applications for other appropriate funding or grants that may be identified, and to authorize the County Administrator or designee to sign the application forms on its behalf. If any awards are received, separate agenda items will be brought to the Board of County Commissioners at future dates outlining agreement terms, funding, and to request appropriate actions.