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

**Date:** June 2, 2022

**To:** Jason E. Brown, County Administrator

**From:** Sean C. Lieske, Director of Utility Services

**Prepared by:** Harrison Youngblood, PE, Utilities Engineer

**Subject:** Work Order No. 9 – Kimley-Horn and Associates Upper Floridan Aquifer Modeling & Consumptive

**Use Permit Modification** 

#### **Background/Analysis:**

Indian River County (IRC) operates two water treatment plants (North County and South County) and two associated wellfields (North and South) that provide potable water to the County's customers. IRC currently operates under Consumptive Use Permit (CUP) No. 10524, issued by St. Johns River Water Management District (SJRWMD). The allocation in the current CUP allows for up to 6.438 million gallons per day (mgd) to be withdrawn from the north wellfield and 6.4 mgd from the south wellfield, for a total allocation of 12.838 mgd. IRC anticipates that by the permit expiration date in 2032, the potable water demand will result in an increased need for 3.390 mgd of additional water, for a new total allocation of 16.228 mgd.

IRC recently explored numerous options for meeting the 2032 demand, including increasing withdrawal from existing wellfields, adding new wells in the south county area, and splitting flows between the two wellfields. IRC is currently in the process of investigating new water sources (Avon Park permeable zone (APPZ)/Lower Floridan Aquifer) for long-term water supply needs. In the meantime, the County would like to revisit the option of obtaining the additional 3.390 mgd from the existing North County wellfield (9 existing wells), identifying the impacted Existing Legal Users (ELUs), and preparing a well avoidance plan and mitigation strategy for future impacts, if feasible. Staff requested that Kimley-Horn and Associates (KHA) submit a proposal for the work required in order to obtain the CUP permit modification from SJRWMD.

The attached Scope of Services outlines the approach to prepare the appropriate SJRWMD groundwater model, quantify impacts from the increased pumping, summarize the ELUs, conduct a well survey, and prepare an avoidance plan. Upon completion of the modeling and ELU assessment, KHA will prepare the SJRWMD application for modification of the CUP. KHA will contract with JLA Geosciences (JLA) to serve as a subconsultant for the preparation of the groundwater model. The KHA and JLA team shall be collectively referred to as the Consultant in the Scope of Services attachment.

#### **Funding:**

Total funding for the project will be \$186,592.00, with funding being split between Fiscal Year (FY) 21-22 and FY 22-23. Funding, in the amount of \$90,300.00, for this year's portion of Work Order No. 9 is budgeted and available in Utilities/Water Production/Other Professional Services, account number 47121936-033190, in the Utilities operating fund. Additional funds, in the amount of \$96,092.00, will come from the same account in FY 22-23. Funding, in the amount of \$200.00, for the permit application fee will be budgeted and available in Utilities/Water Production/Licenses and Permits, account number 47121936-034970, in FY 22-23. Utilities operating funds are derived from water and sewer sales.

Description	Account Number	Amount
Utilities/Water Production/Other Professional Services FY 21-22	47121936-033190	\$ 90,300.00
Utilities/Water Production/Other Professional Services FY 22-23	47121936-033190	\$ 96,092.00
Utilities/Water Production/Licenses and Permits FY 22-23	47121936-034970	\$ 200.00
	Total	\$186,592.00

### **Recommendation:**

Staff recommends that the Board of County Commissioners approve Work Order No. 9 with Kimley-Horn and Associates, Inc., for the amount of \$90,300.00 for this year's portion, Fiscal Year (FY) 21-22, and the amount of \$96,092.00 and \$200.00, which will be paid in FY 22-23, and authorize the Chairman to execute the same, as presented.

## Attachment:

Work Order No. 9 – Kimley-Horn and Associates