Agenda Item: **3L-2**

PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS

AGENDA ITEM SUMMARY

Meeting Date:	September 1, 2020	(X) Consent ( ) Workshop	( ) Regular ( ) Public Hearing
Department:	Environmental Resources Management		

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to receive and file: Amendment No.1 to Contract R2019-1728 for Consulting/Professional Services (Contract) with the University of Florida Board of Trustees (Consultant), an institute of higher education authorized to do business in the State of Florida to extend the contract deadline, at no cost to the County, from July 31, 2020 to October 31, 2020.

Summary: On November 5, 2019, the Board of County Commissioners approved Contract R2019-1728 with Consultant. Delegation of authority to the County Administrator, or designee, to sign all future time extensions, task assignments, certifications, and other forms associated with this Contract was approved at that time. Consultant has requested an extension of ninety (90) days due to office closures resulting from the COVID-19 health pandemic. The Contract will provide critical statistics to investigate spatial and temporal trends of water quality parameters for the period between May 1, 2009 and April 30, 2019 (10 water years) within the Lake Worth Lagoon (LWL) Watershed. The data will be correlated with flow and rainfall data to better identify the movement of nutrients and other parameters through the watershed prior to discharge into the LWL. The data and analyses will be included to address specific action plans within the ongoing LWL Management Plan update. Contract costs in the amount of $36,220 are covered through the County Pollution Recovery Trust Fund. Countywide (SS)

Background and Justification: LWL is a unique urban estuary that stretches for over 22 miles north to south between North Palm Beach and Ocean Ridge. LWL ultimately receives freshwater inputs from a watershed greater than 550 square miles in total size that extends from Lake Okeechobee south and east to LWL and includes multiple canals and control structures that regulate the flow of freshwater from Lake Okeechobee and other water control systems within Palm Beach County (County). This research will focus on the C-51 Canal, which serves as the primary discharge of freshwater into LWL, and will supplement data and analyses conducted over the same period for surface water sampling within LWL conducted as part of a long-term agreement between the South Florida Water Management District and the County.

Attachments:
1. Amendment No. 1
2. Delegation of Authority

Recommended by: _____ 8-11-2020 SAS 8/11/2020
Department Director **Date**

Approved by: _____ 8/20/20
Assistant County Administrator **Date**

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2020	2021	2022	2023	2024
Capital Expenditures					
Operating Costs					
External Revenues					
Program Income (County)					
In-Kind Match (County)					
NET FISCAL IMPACT					
# ADDITIONAL FTE POSITIONS (Cumulative)					

Is Item Included in Current Budget? Yes X No ____

Does this item include the use of federal funds? Yes ____ No X

Budget Account No.: Fund 1227 Department 380 Unit 4008 Object 3401

Program ____

B. Recommended Sources of Funds/Summary of Fiscal Impact:

No Fiscal Impact – Time Extension Only

C. Department Fiscal Review:

S. Neary

III. REVIEW COMMENTS

A. OFMB Fiscal and /or Contract Dev. and Control Comments:

7/29/2020
OFMB 7/28 7/28

Contract Development and Control 8/11/2020

B. Legal Sufficiency:

8/11/2020
Assistant County Attorney

C. Other Department Review:

Department Director

FIRST AMENDMENT TO CONSULTING/PROFESSIONAL SERVICES CONTRACT NO. R2019-1728 DATED NOVEMBER 5, 2019, BY AND BETWEEN THE UNIVERSITY OF FLORIDA BOARD OF TRUSTEES AND PALM BEACH COUNTY

THIS FIRST AMENDMENT to the Consulting/Professional Services Contract dated November 5, 2019, (R2019-1728), hereinafter "CONTRACT" by and between The University of Florida Board of Trustees, an institution of higher education authorized to do business in the State of Florida, hereinafter "CONSULTANT" and the Board of County Commissioners of Palm Beach County, a political subdivision of the state of Florida, hereinafter, "COUNTY".

W I T N E S S E T H

WHEREAS, on November 5, 2019, the CONSULTANT and COUNTY entered into a Consulting/Professional Services Contract for statistical analysis and reporting of surface water quality data; and

WHEREAS, CONTRACT Article 14 allows for excusable delays due to causes beyond the control of the CONSULTANT such as a public health emergency; and

WHEREAS, the CONSULTANT has requested a no cost extension due to office closure resulting from COVID-19; and

WHEREAS, Board of County Commissioner's approval includes delegation authority for the County Administrator or designee to sign all future time extensions, task assignments, certifications, and other forms that do not significantly change the scope of work, terms, or conditions of the CONTRACT; and

WHEREAS, by this amendment, the CONSULTANT and the COUNTY mutually agree to amend the CONTRACT terms to extend the expiration date of the CONTRACT for a period of ninety (90) days from July 31, 2020 to October 31, 2020, with all original terms, conditions and unit prices adhered to.

NOW, THEREFORE, in consideration of the mutual covenants, promises, and agreements herein contained, the parties agree as follows:

1. The above recitations are true and correct and incorporated herein.

2. The CONSULTANT has requested this extension in order to offset delays related to the ongoing COVID-19 pandemic.

3. The CONTRACT, dated November 5, 2019, between the CONSULTANT and the COUNTY is hereby amended to extend the expiration date of the CONTRACT from July 31, 2020 to October 31, 2020.

4. Article 2, entitled "Schedule" is hereby amended as follows:

   The CONSULTANT shall commence services upon execution of this contract by the Board of County Commissioners and complete all services by October 31, 2020.

   Reports and other items shall be delivered or completed in accordance with the detailed schedule of payments set forth in Exhibit "B".

5. Exhibit A is hereby deleted in its entirety, and replaced with Exhibit A, attached hereto.

6. Exhibit B is hereby deleted in its entirety, and replaced with Exhibit B, attached hereto.

REMAINDER OF PAGE LEFT INTENTIONALLY BLANK

IN WITNESS WHEREOF, the parties have caused this Amendment to be executed and sealed this 11 day of August, 2020.

OWNER:
Palm Beach County Board of County Commissioners

BY: Deborah Drum
Deborah Drum, Director
Environmental Resources Management

CONSULTANT:
The University of Florida Board of Trustees,
an Institute of Higher Education

BY: JOSHUA PESCH
Amber Hardie
Sponsored Projects Manager

APPROVED AS TO FORM &
LEGAL SUFFICIENCY:

BY: */s/ Scott Stone*
Scott Stone,
Assistant County Attorney

WITNESS:

BY: Daniel Bonilla
(PRINT NAME)

(SIGNATURE

Scope of Work

Lake Worth Lagoon-C51 canal

Amended July 16, 2020

PI: Dr. Samira Daroub, Professor, UF IFAS Everglades Research and Education Center, 3200 E. Palm Beach Rd. Belle Glade, FL 33430; phone (561) 993-1593, sdaroub@ufl.edu

Introduction

Lake Worth Lagoon is a distinctive feature of Palm Beach County. It serves as an urban estuary and provides a variety of environmental services to South Florida's population. Freshwater inflows from regional canals have been identified by the Lake Worth Lagoon Management Plan as one of the main stressors affecting the health of the lagoon. These inflows can result in salinity fluctuations and can carry with them excess nutrients and suspended solids to the lagoon, harming the health of the estuarine system. There are three major freshwater inflows that discharge into Lake Worth Lagoon via canals (C-17, C-51, and C-16 canals). The C-51 canal discharges into the central portion of the lagoon and accounts for more than 60% of the freshwater inflows to the lagoon (Lake Worth Management Plan, 2013). The C-51 canal receives water from the Lake Okeechobee and the Everglades Agricultural Area through the L-10/L-12 and the L-8 canals. Inflows into the C-51 canal are dominated by Lake Okeechobee discharges at its north-west section, agricultural runoff at its center section and by urban runoff at its easternmost section. Determining spatial and temporal trends in water quality parameters in inflow waters coming through the C-51 canal into Lake Worth Lagoon will provide information that can be used to formulate management plans that ensure the preservation and environmental health of the lagoon.

Goal

The main purpose of this research is to investigate spatial and temporal trends for the period between May 1st 2009 and April 30th 2019 (10 water years) in water quality parameters in the C-51 canal and relate these with flow and rainfall using data from the DBHYDRO database that compiles data collected from the South Florida Water Management District (SFWMD) and Palm Beach County. This research will supplement data and analyses conducted for surface water sampling within Lake Worth Lagoon conducted as part of a long-term agreement between SFWMD and Palm Beach County.

Objectives

Determine differences in water quality parameters between sections (west, middle, east) of the C-51 canal.

Determine changes in the studied parameters through time for the west, middle, and east sections of the C-51 canal.

Investigate relationships between rainfall, flow data, and the studied parameters.

Methods

Data collection:

Water quality parameters (TP, TN, TKN, NO_3, NO_2, orthophosphate, turbidity, and TSS) as well as rainfall and flow data will be obtained from the DBHYDRO database of the SFWMD (evaluated parameters might change depending on data availability). Stations located along the C-51 canal will be identified and available data will be determined for the studied period. By-weekly data will be converted into monthly data to perform the comparisons and statistical analyses. Stations will be assigned to the three sections of the canal in the following way:

West section: stations located in the vicinity of Lake Okeechobee at the west end of the L-10 and L-8 canals (stations S-352 and C-10A).

Middle section: stations located between the west section and the S-5A station and east of stations S-352 and C-10A (station S-5AE).

East section: stations located east of the S5A station and west of Lake Worth Lagoon (station S-155).

Statistical analyses:

We propose the following analyses, but we will be considering additional analyses as needed. Summary statistics of parameters will be conducted to assess differences between canal sections. Box and whisker plots will be used to display visual summaries. To perform comparisons of parameters between sections of the canal an ANOVA will be used. Correlation analysis will be used to establish relationships between rainfall, flow data, and various water quality parameters. To determine temporal changes, trend analysis using the nonparametric Mann-Kendall test (Gilbert, 1987 and McBride, 2005) will be used to determine tendencies occurring within each of the sections of the C-51 canal. Statistics will be performed using SAS. The IFAS statistical consulting service will be consulted to assist in statistical analyses as needed.

Tentative timeline

Data collection/processing (November 1st, 2019 – November 30th, 2019)

Data analyses/statistics and summary (December 1st, 2019 – February 31st, 2020)

Report writing (March 1st, 2020 – September 1st, 2020)

Final revisions for submitted report: October 31st, 2020

Budget

Requested total budget is $ 36,220.

The budget includes salaries and fringe benefits for one Research Associate at 11% time and one postdoctoral associate (22% time) for 12 months (Nov. 1, 2019- October 31, 2020). Fringe is at 26.8 % for research associate and 12.1 % for postdoctoral associate.

References

Gilbert, R. O. 1987. Statistical methods for environmental monitoring. John Wiley & Sons, New York.

Lake Worth Management Plan (2013). Lake Worth Lagoon Initiative. Available at: https://www.floridamuseum.ufl.edu/wp-content/uploads/sites/51/2017/04/Lake-Worth-Management-Plan-2013.pdf

McBride, G. B. 2005. Using statistical methods for water quality management, issues, problems and solutions. John Wiley & Sons, New York.

SAS Institute, 2015. Version 9.4. SAS Inst., Cary, NC.

EXHIBIT "B"

SCHEDULE OF PAYMENTS

The Scope of Work to be completed by CONSULTANT as defined in Exhibit "A" consists of specific completion phases which shall be clearly identified on a phase-by-phase basis upon submission to the COUNTY of certain "deliverables"* as expressly indicated below. Compensation for the work tasks stated herein shall be in accordance with the following Schedule of Payments:

Invoice #1
Task(s) to be completed: Data download, analysis and statistics.
Completion Time: February 29, 2020
Compensation for Invoice 1: $16,098
Deliverable(s) Required: Interim Report with summary of data analysis

Invoice #2
Task(s) to be completed: Data analysis, statistics and graphical summary.
Completion Time: October 31, 2020
Compensation for Invoice 1: $20,122
Deliverable(s) Required: Final Report. Draft report to be provided for County review thirty (30) days prior to submission of Final Report.

ATTACHMENT 2

INTEROFFICE MEMORANDUM
Palm Beach County
Environmental Resources Management

DATE: November 12, 2019

TO: Verdenia C. Baker
County Administrator

THROUGH: Patrick Rutter PWR
Assistant County Administrator

FROM: Deborah Drum, Director DRD 11-13-19
Environmental Resources Management

SUBJECT: REQUEST FOR DELEGATION OF APPROVAL AUTHORITY: **Contract for Consulting/Professional Services (Contract) with the University of Florida, Board of Trustees, providing for statistical analysis and reporting of surface water quality data, beginning on November 1, 2019 and expiring July 31, 2020.**

On November 5, 2019, agenda item 3L1 (R2019-1728) the Board of County Commissioners approved the County Administrator, or designee, to sign all future time extensions, task assignments, certifications, and other forms associated with the Contract, and any necessary minor amendments that do not significantly change the scope of work, terms, or conditions of the Contract.

This memorandum is my request for delegation of signatory authority for the Director or Deputy Director of Environmental Resources Management (ERM) to sign all future time extensions, task assignments, certifications, and other forms associated with this Contract, and any necessary minor amendments that do not substantially change the scope of work, terms, or conditions of the Contract. If you agree, please sign below and return this memorandum. I am available to answer any questions you may have concerning this request. Thank you in advance for your consideration.

APPROVED: VC Baker DATE: 11/22/19
Verdenia C. Baker, County Administrator

DD:kf
Attachment