

TOWN COUNCIL

STAFF REPORT

Engineering Department



MEETING DATE:	July 13, 2021
PROJECT:	Consideration of a Resolution to Establish a Memorandum of Understanding with University of South Carolina Beaufort to Establish and Fund a Microbial Source Tracking Laboratory
PROJECT MANAGER:	Bryan McIlwee, Director of Engineering

REQUEST:

Staff requests that Town Council consider a Resolution to Establish a Memorandum of Understanding with the University of South Carolina Beaufort to Establish and Fund a Microbial Source Tracking Laboratory.

BACKGROUND/DISCUSSION:

The Town of Bluffton's Microbial Source Tracking (MST) sampling program began in late 2016/early 2017 with guidance from the May River Watershed Action Plan Advisory Committee (WAPAC). MST was considered as a tool to assist the Town with identifying sources of fecal coliform contamination to properly guide mitigation efforts. In MST, water samples are analyzed for unique genetic markers found in gut bacteria that identify organisms. Since the program was established, The Town has contracted with LuminUltra (previously Source Molecular) for analysis of MST samples collected throughout the May River Watershed.

With input from WAPAC, the Town chose to focus on human sources via failing septic tanks as they carry a higher public health risk and are a controllable source of fecal pollution once identified and eliminated. The Town implemented its MST program with the goal of determining if human fecal sources could be the source of the increased bacterial concentrations. Sampling locations were guided by the known location of aging septic systems and historical fecal indicator bacteria (FIB) "hotspots" located in the May River Watershed.

The MST data have been used to drive the Town's Sewer Extension & Connection Policy adopted by Town Council in September 2017, the subsequent Sewer Ordinance amendment and Septic to Sewer Conversion Program creation in September 2018, and the 5-year Capital Improvement Program (CIP) sewer extension and connection projects in the Historic District of Bluffton with additional 319-grant support. These data have also sparked regional discussions of the need for sewer extension with Beaufort County and Beaufort-Jasper Water & Sewer Authority (BJWSA).

CURRENT STATUS:

The Town of Bluffton and Dr. Pettay with the University of South Carolina Beaufort (USCB) have been working together to establish the framework for a regional MST laboratory capable of receiving and analyzing the Town's MST samples. This laboratory will be capable of analytical, technical and programmatic support that is critical to the Town implementing the 2020 May River Watershed Action

Plan Update and Model Report, meeting requirements of the National Pollutant Discharge Elimination System's (NPDES) Municipal Separate Storm Sewer System (MS4) permit, and furthering its ongoing mission to protect human health and the environment.

NEXT STEPS:

Upon Town Council approval, the Town Manger will execute a MOU with the USCB to establish an MST laboratory (*Attachment 1 – Resolution, Exhibit A MOU*) at USCB. This laboratory will provide sound water quality data in a more timely and cost-effective manner without the need to ship samples overnight. These data will continue to support water quality decision-making at all levels.

ATTACHMENTS:

1. Attachment 1 – Resolution
 - A. MOU to Establish and Fund a Microbial Source Tracking Laboratory with the University of South Carolina Beaufort
2. Attachment 2 – Recommended Motion