



Agenda Item Summary

File ID: 19-0279

R&P-1

Meeting Date: 2/26/2019

PLACEMENT: Requests and Presentations

TITLE:

UPDATE ON HARBOR BRANCH OCEANOGRAPHICS INSTITUTE (HBOI): FLORIDA CENTER FOR COASTAL AND HUMAN HEALTH AND RELATED ACTIVITIES

EXECUTIVE SUMMARY:

Dr. Sullivan will present information on work being performed by the newly established Florida Center for Coastal and Human Health at the Harbor Branch Oceanographic Institute (HBOI) and related activities at HBOI impacting the region.

DEPARTMENT: Public Works

PREPARED BY: **Name:** Kathy FitzPatrick
Title: Coastal Engineer

REQUESTED BY: Commissioners Edward V. Ciampi and Stacey Hetherington

PRESET: 2:30 PM

PROCEDURES: None

BACKGROUND/RELATED STRATEGIC GOAL:

In 2018 Martin County experienced a massive blue-green algae bloom in our waterways, similar to the bloom that occurred in county waterways in 2016. Also in 2018, a highly unusual red tide (*Karenia brevis*) bloom moved into the Atlantic Ocean along the east coast of Florida, persisting for several weeks. This resulted in warning signs being posted at access points to Martin County's inland waterways and also at the coastal beaches. Threats to human health were suspected but not known. The negative impact to the economy and lifestyle of Martin County was undeniable.

Martin County has benefitted from the expertise of scientists at the Harbor Branch Oceanographic Institute (HBOI) over the past several years. Working closely with County staff in matters relating to coral conservation and marine/estuarine water quality, scientists at HBOI have helped County staff understand and respond to issues as they arise. The attached letters of support provide an indication of the types of locally focused projects that have been conducted by HBOI.

The Florida Center for Coastal and Human Health (Center) was created at the HBOI to act as a focal point for a consortium of researchers seeking to better understand the causes and effects of these Harmful Algal Blooms (HABs) in the Indian River Lagoon and coastal Atlantic Ocean. This work is performed with the long term goal of healthy waterways.

Scientists at HBOI bring a wide range of proficiencies regarding HABs and related marine and estuarine ecological stressors. The Center is actively working to establish relationships with other researchers in our region to maximize the efficiency and productivity of ongoing research. Participation by other stakeholders will help to leverage funding and improve communication between researchers and with the general public. Martin County recently signed a Memorandum of Understanding with the Center to establish lines of communication and to work with other stakeholders in the region to provide input on priority work.

ISSUES:

During the recent red tide outbreak, it was necessary to send water samples to the west coast laboratory of FWC because no lab on the east coast was certified to provide analysis. Likewise, in the past when blue-green algae spreads through our waterways, no local labs were sampling and testing on a routine basis. The proximity of the Center will allow a more pro-active program of sampling and analysis of HABs ecological dynamics year round, and improved responsiveness when outbreaks occur. In addition, while FWC analyzes water samples for the number of harmful algae present, they do not routinely test the water for the amount of actual toxins it contains. The Center will not only analyze both the type and numbers of harmful algae in local waters year round, but also conduct routine toxin assays when warranted. In addition, the Center will be investigating the exposure of local human populations to toxins in the water through blood, urine and nasal swab sampling of volunteers who have been recreationally or occupationally exposed to blooms. This critical work is not currently being done by any agencies.

LEGAL SUFFICIENCY REVIEW:

None

RECOMMENDED ACTION:

RECOMMENDATION

None

ALTERNATIVE RECOMMENDATIONS

None

FISCAL IMPACT:

RECOMMENDATION

None

Funding Source	County Funds	Non-County Funds
Subtotal		
Project Total		

ALTERNATIVE RECOMMENDATIONS

None

DOCUMENT(S) REQUIRING ACTION:

- ☐ Budget Transfer / Amendment ☐ Chair Letter ☐ Contract / Agreement
☐ Grant / Application ☐ Notice ☐ Ordinance ☐ Resolution
☐ Other:

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