



## INDIAN RIVER COUNTY, FLORIDA DEPARTMENT OF UTILITY SERVICES

---

**Date:** September 12, 2017

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

**From:** Vincent Burke, P.E., Director of Utility Services

**Prepared By:** Arjuna Weragoda, P.E., Capital Projects Manager

**Subject:** Authorization for Southern Management to Provide Emergency Restoration Work at Spoonbill Marsh due to Hurricane Irma.

---

### **DESCRIPTIONS AND CONDITIONS:**

Indian River County Department of Utility Services (IRCDUS) owns and operates two (2) regional potable water treatment facilities. The North County Reverse Osmosis (NCRO) Water Treatment Plant is rated for 11.44 million gallons per day (mgd) and provides critical potable water to County customers. The facility includes a brackish water wetland treatment and disposal site named Spoonbill Marsh (Marsh). Demineralization concentrate from the NCRO water treatment plant is transmitted via a 16-inch diameter pipe and blended with Indian River Lagoon water at ratios to achieve compliance with Class III marine surface waters, then discharged to a 69+ acre marsh before exiting through runnels to the Indian River Lagoon (IRL). The Marsh is operated under the specific conditions referenced in the Florida Department of Environmental Protection (FDEP) issued Permit Number 31-FL0166511.

On September 4, 2017, Florida Governor Rick Scott issued Executive Order 17-235 by declaring a state of emergency to prepare Florida for Hurricane Irma. On September 7, 2017, County Administrator Jason Brown issued Emergency Order 2017-001 and declared a state of emergency for Indian River County in preparation for Hurricane Irma. Hurricane Irma impacted the County on September 10, 2017, bringing in heavy precipitation and violent wind gusts. The severe weather caused silt to be deposited in the spoonbill pump sump, eroded banks, washed away portions of the access roadway to the site, and caused extensive site clogging of the two major runnels (WIM-001 & WIM-002) that serve as the primary outfalls from the marsh. The strong winds and storm surge from Hurricane Irma uprooted vegetation and damaged portions of the boardwalk. Due to the significant amount of silt in the pump basin, the pumps conveying flows from IRL are currently inoperable, which in turn affects our ability to comply with the FDEP permit requirements.

### **ANALYSIS:**

In order to comply with FDEP permit conditions, it is essential that the Marsh needs to be restored as soon as possible. Southern Management has performed maintenance at the Marsh and has intimate working knowledge of the best management practices needed to restore such a bio-diverse marsh to

compliance with the FDEP permit requirements. Prior to the storm, staff reached out to Southern Management for an emergency response after Hurricane Irma passed. They were on site to perform debris clearing (not removal) to access the site and assess the damages. A preliminary assessment of the damage and a cost estimate was dropped off to IRCDUS on Tuesday, September 12, 2017.

<b>Purchase Order</b>	<b>Date</b>	<b>Description</b>	<b>Amount</b>
78167	9/6/2017	As needed debris clearing and site repairs	\$ 10,000.00
78167-01	9/12/2017	Change Order 01	
		Pump Road Erosion Repair	\$ 4,858.00
		Pump basin / Manatee Fence Area Repair	\$ 28,735.00
		<b>PO Subtotal</b>	<b>\$ 43,593.00</b>
	9/19/2017	Mosquito Ditches Clearing/ Cleaning	\$ 36,500.00
		Runnel Clearing/ Cleaning	\$ 98,450.00
		<b>Additional Emergency Work Subtotal</b>	<b>\$ 134,950.00</b>
		<b>Contingency</b>	<b>\$10,000.00</b>
Sum total of Spoonbill Restoration from Irma			\$ 188,543.00

The intention is to have the subject restoration performed as soon as possible. However, due to the high water table and unforeseen issues, there could be additional effort required to restore the site. The above items are initial estimates of the needed restoration. Actual work will be catalogued through man-hour breakdown, equipment, and material used for documentation purposes. The contingency line item is to be used for any unknown issues that may appear during the restoration efforts. Therefore, staff recommends authorizing Southern Management to perform emergency site restoration from Hurricane Irma impacts.

Additionally, there are some non-emergency items that will need to be addressed at a future point in time. They are not critical to the operation of the site now, but will be required. Those items are listed below:

<b><u>Non-Emergency Repairs/Restoration (estimate)</u></b>	<b><u>Amount</u></b>
Boardwalk Repair	\$ 17,935.00
Boardwalk Decking	\$ 975.00
Floating Mats	\$ 1,650.00
Maintenance Road between Mixing Ponds	\$ 3,950.00
Northern Mixing Pond Road	\$ 4,850.00
FDOT Ditch spillover area	\$ 9,750.00
<b>Sum Total</b>	<b>\$ 39,110.00</b>

**FUNDING:**

Funding for site restoration due to Hurricane Irma at the Marsh will require a budget amendment from the Fund Balance for the Utilities Operating Fund. Operating funds are derived from water and sewer sales.

Description	Account Number	Amount
Spoonbill Marsh-Site Restoration due to Hurricane Irma	47121936-033490-17026	\$188,543.00

**RECOMMENDATION:**

Staff recommends approval of the proposal authorizing the outlined services and requests the Board of County Commissioners direct the Purchasing Manager to issue a Purchase Order for a lump sum amount of \$188,543.00 to Southern Management and waive the competitive procurement process. In addition, staff recommends approval of a budget amendment to cover said expenses.

**ATTACHMENT(s):**

Spoonbill Marsh Hurricane Irma Damage Assessment Report