### SOUTHGATE MITIGATION SITE

## 2018 Annual Monitoring Report

USACE Permit No.: SAJ-2015-02153 (NW-RLT), issued 1/13/2016

Permittee: Florida Department of Transportation, District Three

C/o Colby Cleveland 1074 Highway 90 Chipley, FL 32428

Responsible Party for Monitoring: Northwest Florida Water Management District

81 Water Management Drive

Havana, FL 32333

Date of Inspection: 11/5/2018

## **Summary:**

This project (Southgate Mitigation Site) provides offsetting mitigation for 0.26 acres of impact to tidal marsh (0.16 UMAM functional loss) associated with FDOT construction of a multiuse path adjacent to SR 300 (from St. George Island Bridge to US 98). As authorized by USACE Permit SAJ-2015-02153 (NW-RLT), the mitigation wetlands are palustrine emergent (sawgrass tidal marsh). Mitigation was implemented at St. Joseph Bay State Buffer Preserve (Buffer Preserve, FDEP, Florida Coastal Office) via installation of one low-water-crossing at Southgate, which enhanced the hydrologic regime of an estimated 6.49 acres of sawgrass tidal marsh by removing an impediment to natural surface flows.

Southgate (29.6865° North, 85.3017° West), a raised dirt road used by the Buffer Preserve for management access, forms a "T" intersection with SR 30A approximately 0.5 mile east of the SR 30E / SR 30A intersection. Parking is available adjacent to the mitigation site on SR 30A; pedestrian access to the site is allowed at any time during daylight hours without prior notification. Dylan Shoemaker, Preserve Manager (850-229-1787) should be contacted if any access issues arise.

Raised above natural grade, Southgate bisected a palustrine emergent wetland marsh and disrupted natural hydrologic flows and moisture regimes. The low-water-crossing designed to enhance the hydrology of adjacent wetlands was installed mid-October 2016.

An inspection by NWFWMD staff on 11/5/2018 confirmed that the low-water-crossing was damaged by storm surge associated with Hurricane Michael.<sup>1</sup> Remediation planning is underway and will entail reconstruction of the low-water-crossing. Wood and plastic debris carried into the

<sup>&</sup>lt;sup>1</sup> Hurricane Michael made landfall on October 10, 2018 approximately 15-20 miles NNW of the Southgate Mitigation Site as a high-end Category 4 storm (preliminary reports indicate sustained winds of 155 mph at landfall).

adjacent palustrine emergent wetlands by the storm surge is being cleaned up by Buffer Preserve staff. Invasive or exotic species listed on the "Florida Exotic Pest Plant Council 2015 List of Invasive Plant Species" within the 6.49-acre enhancement polygon were not observed. Despite damage to the low-water-crossing, the emergent marsh and adjacent pine flatwoods appear to have sustained little damage to vegetation structure; no hydrologic blockages reformed due to the storm surge. Once the low-water-crossing is remediated, the site will continue to be managed for ecological integrity by an ARC-approved (Acquisitions and Restoration Council) St. Joseph Bay State Buffer Preserve management (available plan at www.dep.state.fl.us/coastal/sites/stjoseph\_buffer/). The Buffer Preserve emphasizes prescribed fire and management of exotic vegetation.

#### **Performance Standards:**

- Low-water-crossing installed at appropriate elevation to allow unimpeded flows.
- Not greater than 10 percent cover by invasive or exotic species listed on the "Florida Exotic Pest Plant Council 2015 List of Invasive Plant Species" within the 6.49-acre enhancement polygon.

# **Monitoring Requirements:**

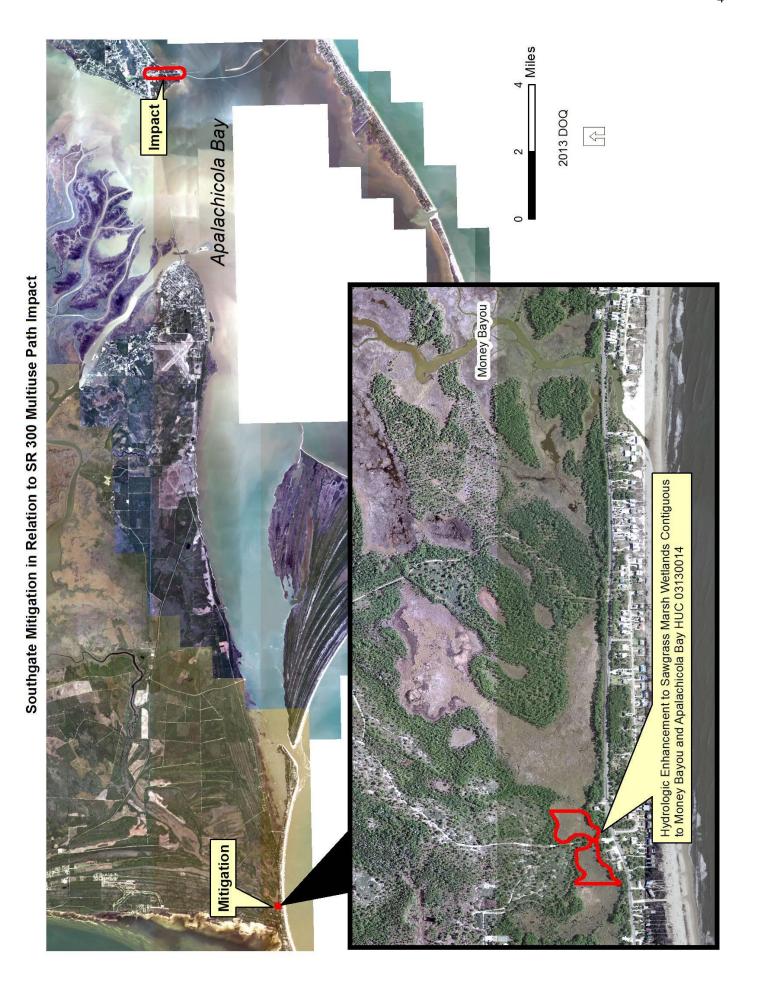
- Inspection and photo-documentation of low-water-crossing site.
- Frequency
  - o "Time Zero" monitoring in Fall, 2016.
  - o Semi-annual monitoring for 2017 (Spring and Fall, 2017).
  - o Annual monitoring (Fall, 2018 2019).
- Annual reports submitted to the USACE for duration of monitoring (semi-annual reports are to be combined into one annual report for submission).

During the most recent site inspection of 11/5/2018, performance standards associated with invasive or exotic vegetation were found to be met. Hydrologic flows within the marsh continue to be unimpeded by the Southgate access road, although the low-water-crossing will require remediation due to erosion caused by storm surge associated with Hurricane Michael.

### **Conclusions:**

The 2016 installation of one low-water-crossing at Southgate enhanced the hydrology of the adjacent palustrine emergent wetlands (sawgrass tidal marsh) by removing an impediment to natural hydrologic flows. The low-water-crossing was damaged by Hurricane Michael and will require remediation (anticipated to be complete by or before Spring 2019). Adjacent palustrine emergent wetlands are being managed for ecological integrity per the St. Joseph Bay State Buffer Preserve management plan. No invasive or exotic plant species listed on the "Florida Exotic Pest

Plant Council 2015 List of Invasive Plant Species" appear present within the enhancement polygons. Monitoring inspections will continue through 2019 or as directed by the USACE.







Southgate LWC (11/5/2018)



Southgate LWC (11/5/2018)



Enhancement Polygon, East Side (11/5/2018)



Enhancement Polygon, West Side (11/5/2018)