MYSTIC SPRINGS MITIGATION SITE

2019 Annual Monitoring Report

USACE Permit No.: SAJ-2015-03537 (SP-MAO), issued 6/30/2016

Permittee: Florida Department of Transportation, District 3

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

Dates of Inspection: 9/17/2019

Synopsis:

Tree survivorship and density continues to exceed the required performance standard of 400 trees per acre. Most planted trees appear healthy and adapted to the periodic flooding characteristic of this site, although some exhibit signs of stress from extended flooding in 2019. Percent coverage of exotic and invasive species is within permit conditions.

Background:

The purpose of this project (Mystic Springs Mitigation Site) is to provide offsetting mitigation for 1.88 acres of impact (1.21 acres direct/permanent; 0.67 acres secondary) to freshwater palustrine wetlands (0.82 UMAM functional loss) associated with FDOT replacement and realignment of the CR 99 Pine Barren Creek Bridge in Escambia County, Florida. As required by Special Condition No. 8 of the USACE permit, mitigation has been implemented at the Mystic Springs site on NWFWMD lands along the Escambia River floodplain via planting forested wetland species on approximately 5.52 acres.

Mystic Springs Mitigation Site (30.8563° North, 87.3129° West), a sand pit excavated in the 1940s or early 1950s, is located adjacent to the public boat ramp (Mystic Springs Road) on the Escambia River approximately one mile east of US 29 and 1.5 miles southeast of McDavid, Florida. Foot access is possible at any time without prior notice.

In accordance with the restoration plan, 2,396 trees (447 red maple, 447 river birch, 224 Carolina ash, 1,278 bald cypress; each tree 4-5' tall) were planted at the mitigation area from April 25 - 28, 2017. Trees were planted in the plantable areas on 8' centers at a rate of 681 trees per acre.

Performance Standards:

- 400 hydrophytic trees per acre in a healthy and thriving condition.
- Nuisance vegetation ≤5% cover per acre.
- Exotic vegetation $\leq 1\%$ cover per acre.

Monitoring Requirements:

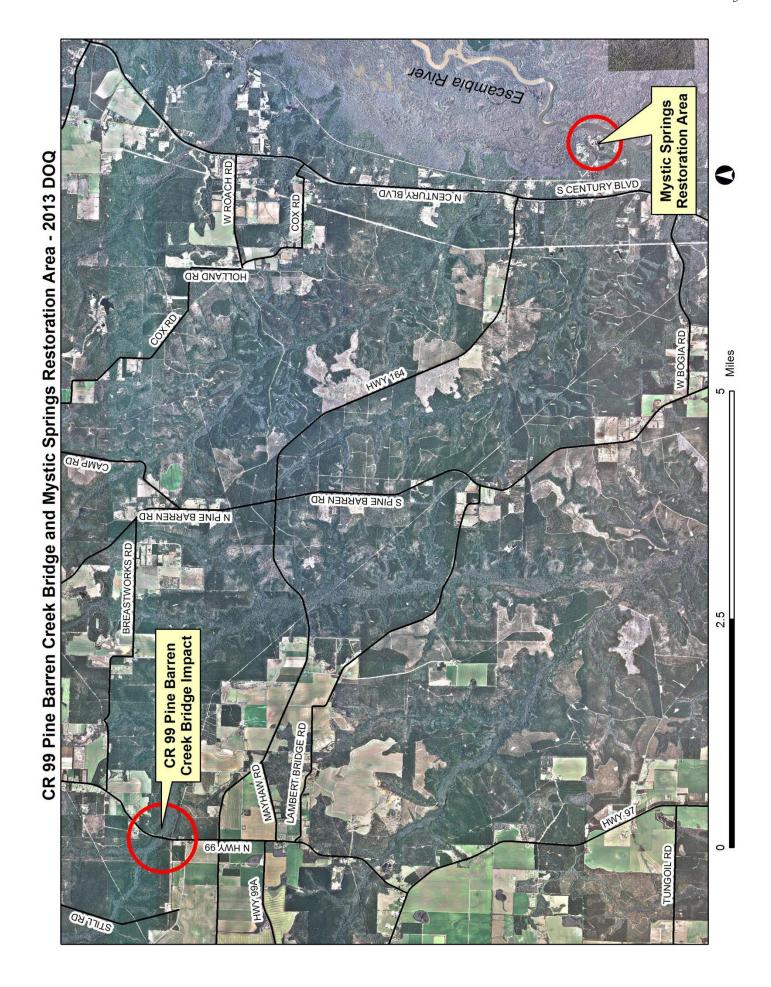
- Inspection and photo-documentation of site.
- Frequency
 - o "Time-Zero" monitoring (Spring, 2017).
 - o Semi-annual monitoring (Fall, 2017; Spring and Fall, 2018).
 - o Annual monitoring (Fall, 2019 2021).
- "Time-Zero" monitoring report to be submitted within 60 days of implementation of mitigation.
- Annual reports submitted to the USACE for duration of monitoring (2017 2021; semi-annual reports are to be combined into one annual report for submission).

Conclusions:

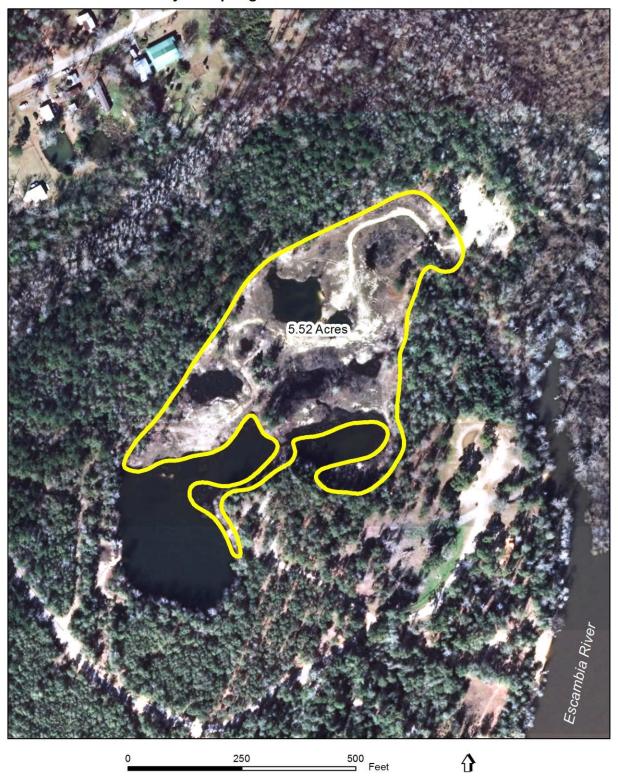
The site inspection of 9/17/2019 found that all performance standards are being met. The number of trees successfully established per acre exceeds permit requirements. Planted trees are generally healthy and thriving, although some show signs of stress from extended flooding in 2019. Exotic and invasive vegetation coverage is within permit conditions.

All monitoring reports will be submitted to the USACE Enforcement Section, Pensacola, Florida, and posted at:

https://www.nwfwater.com/Water-Resources/Regional-Wetland-Mitigation-Program/Umbrella-Plan/NWFWMD-Mitigation-Sites/Pensacola-Watershed-Mitigation-Sites/Mystic-Springs/Monitoring-Reports.



Mystic Springs Restoration Area - 2013 DOQ





Mystic Springs (9/17/2019)



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