

MYSTIC SPRINGS MITIGATION SITE

Fall 2017 Monitoring Report

15 November 2017

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

Date of Inspection: 10/25/2017

Synopsis:

As reported in the initial "Time-Zero" monitoring report (submitted to the USACE on June 1, 2017), vandals stole or destroyed an estimated 126 planted trees (out of a total of 2,396 trees planted) shortly after the April 2017 planting. Since then, no additional vandalism or theft of trees has occurred. Despite the initial loss of 126 trees, tree survivorship is excellent; density continues to exceed the required performance standard of 400 trees per acre. No exotic or invasive vegetation is present.

During the most recent inspection (10/25/2017), the site was flooded to a depth of several feet due to periodic flooding of the Escambia River. Water levels at the restoration site will drop as the Escambia River flooding recedes. Planted trees appear healthy and are adapted to the periodic flooding characteristic of this site.

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 NFWFMD 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 $\leq 5\%$ cover per acre.
- Exotic vegetation $\leq 1\%$ cover per acre.

Monitoring Requirements:

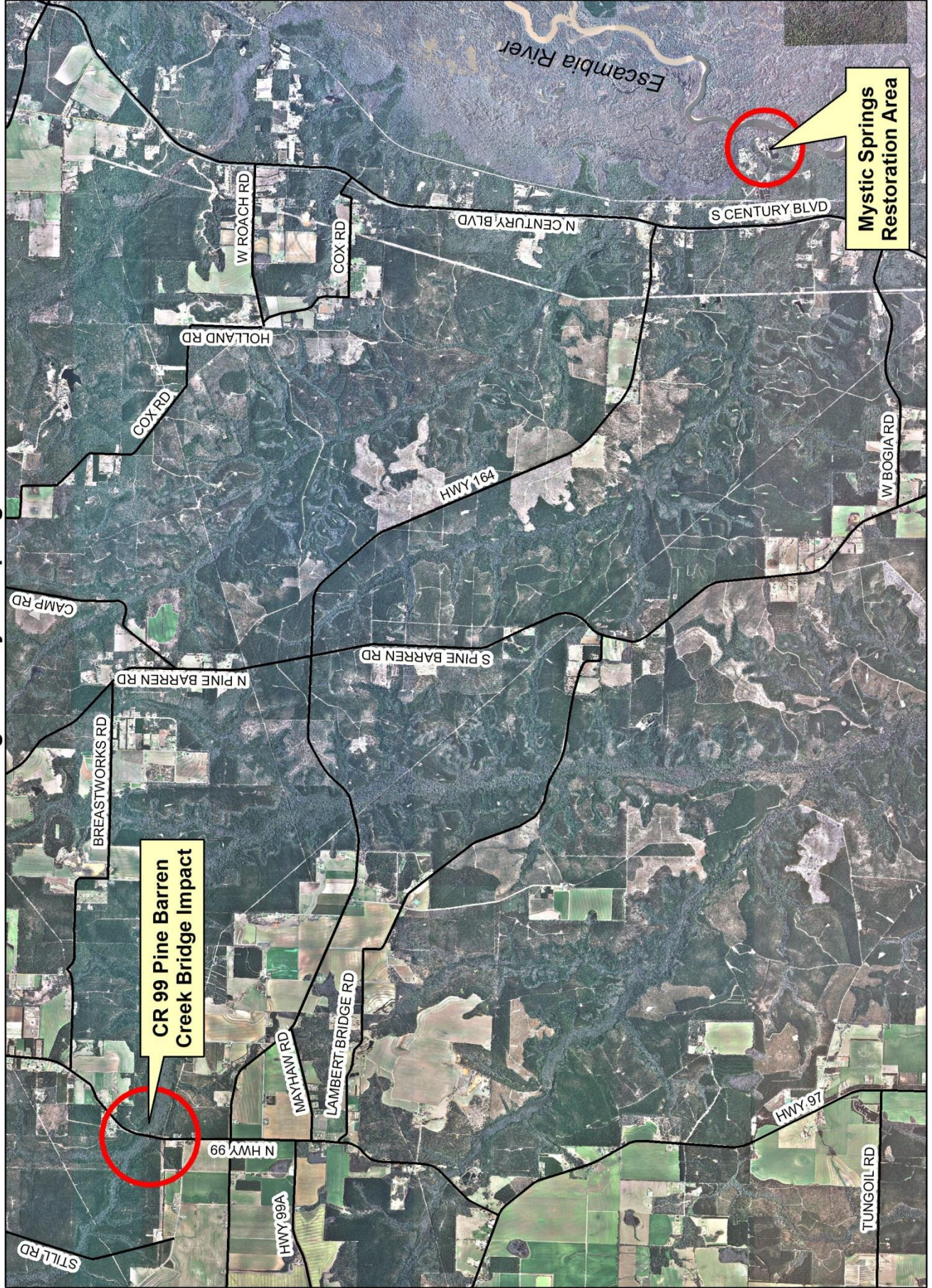
- Inspection and photo-documentation of site.
- Frequency
 - “Time-Zero” monitoring (Spring, 2017).
 - Semi-annual monitoring (Fall, 2017; Spring and Fall, 2018).
 - Annual monitoring (Fall, 2019 – 2021).
- “Time-Zero” monitoring report to be submitted within 60 days of implementation of mitigation.
- 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:

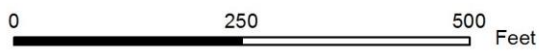
The site inspection of 10/25/2017 found that all performance standards are being met. The number of trees successfully established per acre exceeds permit requirements. Planted trees are healthy and thriving. No exotic or invasive vegetation is present. Since the initial “Time-Zero” inspection, no additional vandalism/theft of plants has occurred.

All monitoring reports will be submitted to the USACE Enforcement Section, Pensacola, Florida, and posted at www.NFWMDwetlands.com.

CR 99 Pine Barren Creek Bridge and Mystic Springs Restoration Area - 2013 DOQ



Mystic Springs Restoration Area - 2013 DOQ



Escambia River



Mystic Springs (10/25/2017)



Mystic Springs (10/25/2017)



Mystic Springs (10/25/2017)



Mystic Springs (10/25/2017)



Mystic Springs (10/25/2017)



Mystic Springs (10/25/2017)