MYSTIC SPRINGS MITIGATION SITE

2022 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
Date of Inspection:	10/6/2022

Synopsis:

Survivorship and density of hydrophytic trees planted at Mystic Springs exceeds the required performance standard of 400 trees per acre averaged across the mitigation area. Quantitative sampling, conducted in 2021, found that tree density averages 518 trees per acre. Planted cypress are generally healthy and adapted to the periodic flooding characteristic of this site, although stress from extended flooding in 2019 caused some mortality among planted trees, especially for red maple, river birch, and Carolina ash. Exotic and invasive species are not present.

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 (30.8563º North, 87.3129º 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 FT tall) were planted at the mitigation area from April 25 – 28, 2017. Trees were planted in the plantable areas on 8 FT centers at a rate of 681 trees per acre.

Performance Standards:

- 400 hydrophytic trees per acre in a healthy and thriving condition. [Met]
- Nuisance vegetation ≤5% cover per acre. [Met]
- Exotic vegetation ≤1% cover per acre. [Met]

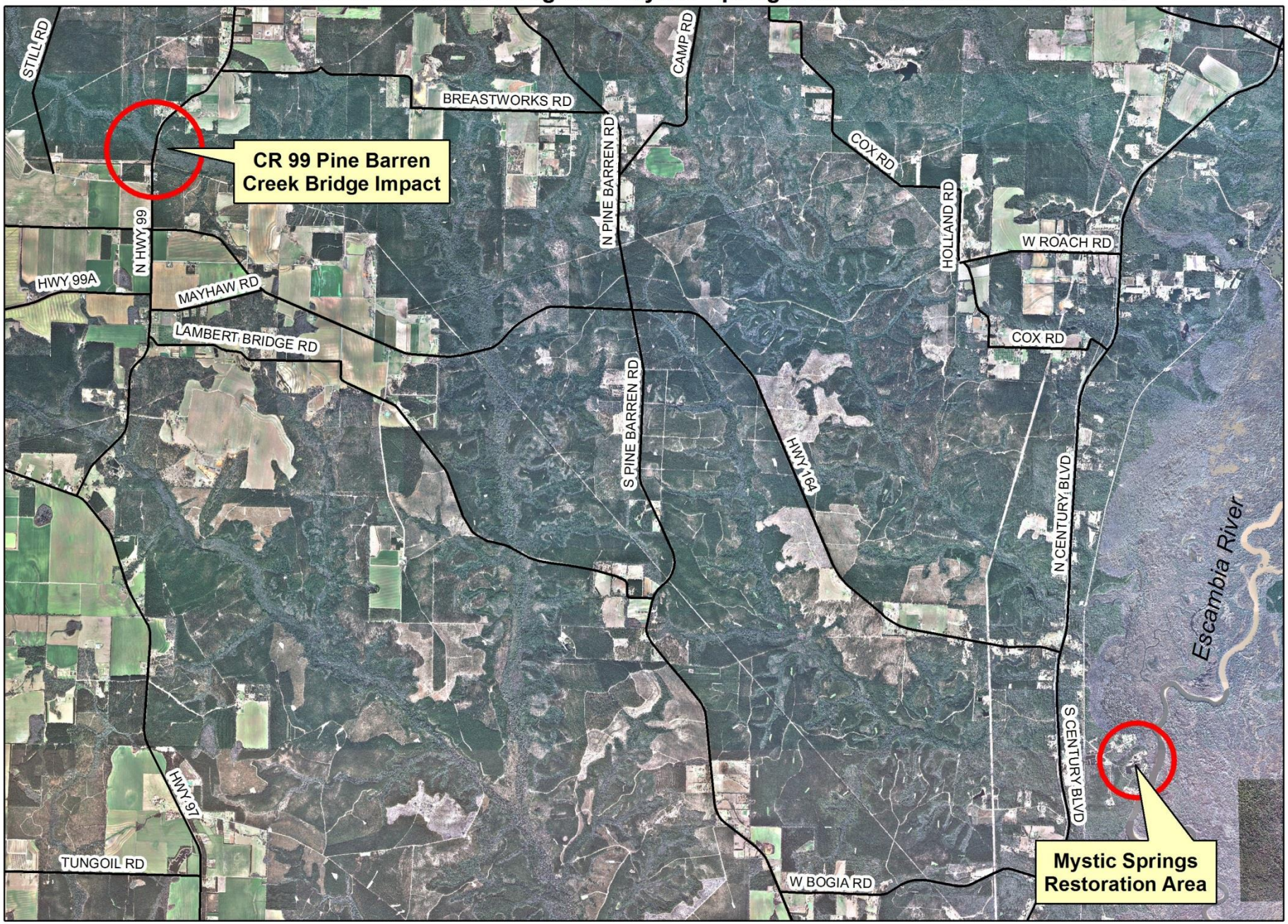
Monitoring Requirements:

- 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 – 2022).
- "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 – 2022; semi-annual reports are to be combined into one annual report for submission). Reports will be posted at the NWFWMD website.

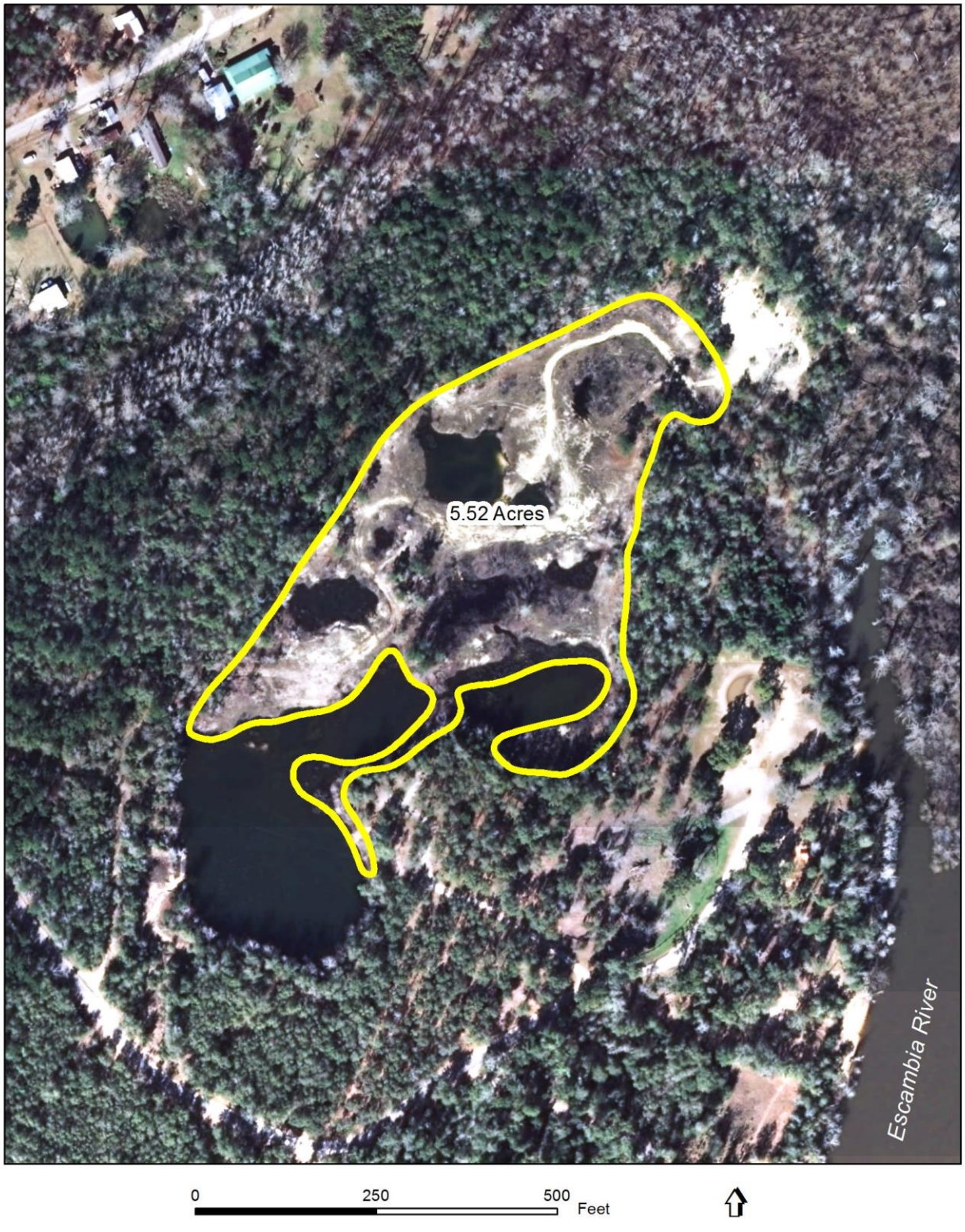
Conclusions:

The successful establishment of hydrophytic trees at Mystics Springs exceeds the minimum performance standard of 400 trees per acre averaged across the site. Exotic and invasive vegetation is not present within the mitigation area. This concludes five years of monitoring as required by permit conditions. Unless otherwise directed by the USACE, no further monitoring reports shall be submitted. Although scheduled monitoring has concluded, periodic inspections will continue. The site will be maintained in a natural state in perpetuity as part of NWFWMD conservation lands.

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



Mystic Springs Restoration Area - 2013 DOQ



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