



Environmental Survey Report

Wetland Delineation and Gopher Tortoise Burrow Survey

Volusia County, Florida Parcel ID: 701608000040 and 701608000050

Prepared for:

Alek Maforte

Prepared by:

Palmer Biological Services, LLC
817 East 15th Avenue
New Smyrna Beach, Florida 32169

August 11, 2022

Palmer Biological Services - 817 East 15th Avenue - New Smyrna Beach, Florida 32169
Scope of Work

The subject property (Volusia County Altkey: 2246260 and 2246278) is on SR 44 New York Avenue E in DeLand, Florida. Background research and aerial photography on google earth indicated that wetlands may be present on or adjacent to the subject property and that a gopher tortoise burrow survey will be required. This wetland delineation was performed at the request of the Client in preparation for sale and possible development of the parcel. The survey was conducted as per requirements set forth in “Delineation of the Landward Extent of Wetlands and Surface Waters” (F.A.C. 62-340) and the Florida Fish and Wildlife Conservation Commission “Gopher Tortoise Permitting Guidelines” (FWC 2021).

Wetlands

On August 10, 2022, Palmer Biological staff ecologists visited the subject property and performed a wetland delineation. The presence or absence of wetlands was determined using available wetland and upland vegetation ID, soil analysis and hydrologic indicators. Zero (0.8) wetland boundaries were delineated in the field (**Wetland Delineation – Aerial Sketch**). Hydrologic, vegetative, and soil indicators were observed on the subject property.

Vegetation – upland and facultative species were identified on the subject property. Species observed are listed below:

laurel oak (*Quercus laurifolia*) slash pine (*Pinus elliottii*)
camphor tree (*Cinnamomum camphora*) chinaberry (*Melia azedarach*)
bracken fern (*Pteridium aquilinum*) blackberry (*Rubus spp.*)
catclaw (*Smilax spp.*) cabbage palm (*Sabal palmetto*)
beautyberry (*Callicarpa americana*) chain fern (*Woodwardia virginica*)
coral ardisia (*Ardisia crenata*) cross vine (*Bignonia capreolata*)
wedelia (*Sphagneticola trilobata*)

Soils – The Natural Resource Soil Survey indicates that Soil Type 6 Astatula-Urban Land Complex, 0 to 8% Slopes and Soil Type 63 Tavares Fine Sand, 0 to 5% Slopes are the soil types on the subject property. No hydric soils were observed; further investigation required.

Hydrologic Indicators – hydrologic indicators were observed on the subject property.

Listed Species

A 100% pedestrian transect gopher tortoise (*Gopherus polyphemus*) burrow survey was conducted on the subject property. potentially occupied burrows were observed.

Conclusions and Recommendations

Prior to our site work, research of available maps and other resources was performed in anticipation of site

conditions. Background research indicated that wetlands may be present based on the U.S. Fish and Wildlife Services National Wetland Inventory (NWI). Upon site inspection, soil, hydric, or vegetative indicators were observed. Wetland flags were not placed in the field for this survey. Other observations included significant elevation shifts across the subject property and many invasive canopy species.

All wetland delineations are subject to regulatory review. Please check with local authorities concerning any setbacks or buffers prior to any construction, clearing, or filling. Please contact our office for any questions or additional information concerning this report.

References

1. Florida Wetland Plants: An Identification Manual (DEP January 1998)
2. Volusia County GIS Mapping Kiosk online services (2022).
3. FAC 62-340 “Delineation of the Landward Extent of Wetlands and Surface Waters” (FDEP 1994).
4. Munsell Soil Color Charts.
5. ISB: Atlas of Florida Vascular Plants (On-line Service 2009).
6. Google Earth on-line mapping services (2022).
7. University of Florida Forest Stewardship, “Common Trees in Florida Hardwood Forests” (2009).
8. Wetland Delineation Methodology (Florida DEP 1997).
9. National Wetland Inventory “Wetlands Mapper” (2022).
10. University of Florida Historical Aerial Photo Archive (2022).
11. Florida Fish and Wildlife Conservation Commission Permitting Guidelines (2021).

Palmer Biological Services - 817 East 15th Avenue - New Smyrna Beach, Florida 32169

Wetland Delineation - Aerial Sketch Map



↑
N

The entire site is uplands

Palmer Biological Services, LLC
August 10, 2022