

Wetland Delineation and Listed Species Report

Volusia County, Florida AltKey Parcels 3359844, 3359852 and 3359861 on Swamp Deer Road

For the Client

Randy Brisell

By the Consultant

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Scope of Work

The subject property (Volusia County, Florida AltKey Parcels 3359844, 3359852 and 3359861) comprises approximately 7.5 acres and is located east of Highway 415 on Swamp Deer Road in New Smyrna Beach, Florida. Prior to our site visit, research of the subject property revealed that wetlands are present, and that the property lies within the Volusia County Natural Resource Management Area (NRMA). Additionally, a portion of the property is included in the Volusia County Environmental Management (VCEM) gopher tortoise overlay. Our wetland 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 January 24, 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.

Soils – Indicator A8 (muck presence) was used as an indicator for this survey.

Vegetation – Upland, facultative, and wetland species were observed on the property. Several of the species observed are listed below:

cinnamon fern (<i>Osmunda cinnamomea</i>)	live oak (<i>Quercus virginiana</i>)
dahoon holly (<i>Ilex cassine</i>)	fetterbush (<i>Lyonia spp.</i>)
water tupelo (<i>Nyssa aquatica</i>)	yellow eyed grass (<i>Xyris spp.</i>)
laurel oak (<i>Quercus laurifolia</i>)	gallberry (<i>Ilex glabra</i>)
swamp bay (<i>Persea palustris</i>)	red maple (<i>Acer rubrum</i>)
saw palmetto (<i>Serenoa repens</i>)	loblolly bay (<i>Gordonia lasianthus</i>)

Hydrologic Indicators –morphological plant adaptations, hummocks, buttressing and hydrologic data.

Listed Species

In addition to our wetland delineation, a pedestrian transect gopher tortoise burrow survey was performed. A single potentially occupied gopher tortoise burrows was observed. The burrow was GPS located and is shown on the attached aerial sketch. A 100% pedestrian transect survey of the property will be required prior to development to ensure that gopher tortoise burrows are not within 25 feet of construction boundaries. All other plant and animal species observed on or adjacent to the subject parcel were common.

Conclusions and Recommendations

Prior to our site work, research of available maps and other resources was performed in anticipation of site conditions. The VCEM GIS mapping system indicated that the subject property is likely to have wetlands on-site and that the property is within the Volusia County NRMA. Upon inspection of the site, hydrologic indicators, hydric soils and wetland vegetative indicators were observed. A portion of the on-site wetland continues into the adjacent property to the east. Development of the subject parcel will require an Environmental Resource Permit (ERP) through the Florida Department of Environmental Protection to access the uplands on the north side of the property. Fifteen (15) orange wetland flags (RB-1 through RB-15) were placed in the field along the wetland boundary as shown. Adjacent vegetation was marked with orange ribbon to aid in location of the markers (**Wetland Sketch**). 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.

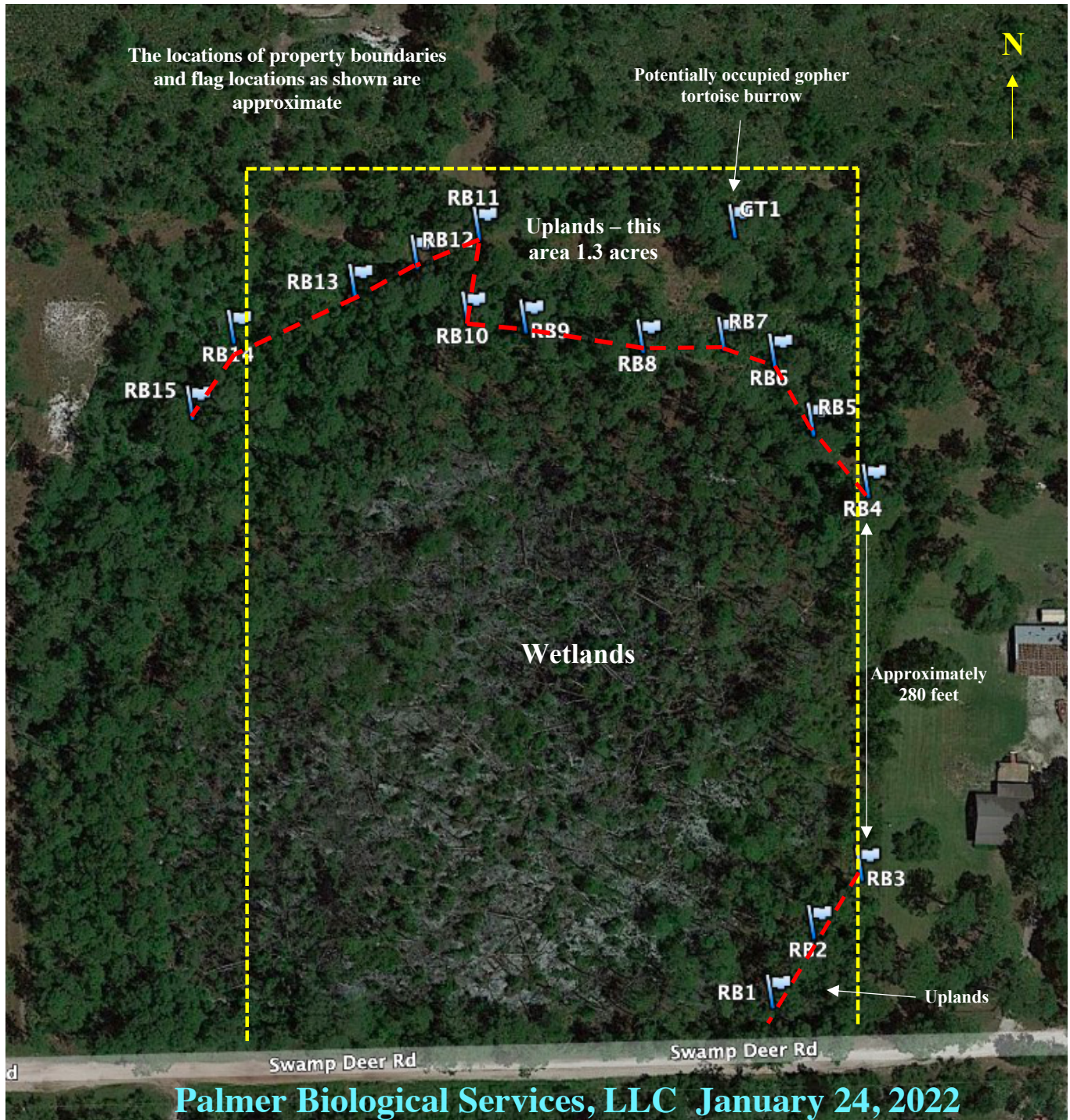
Please contact our office for any questions or additional information concerning this report.

References

1. Florida Wetland Plants: An Identification Manual (DEP January 1998)
2. Volusia County GIS Map 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).

Wetland Delineation Aerial Sketch

Volusia County, Fl AltKey Parcels 3359844, 3359852 and 3359861 on Swamp Deer Rd in New Smyrna Beach



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