



This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CESAJ 2018-01144-PTR (The Villages Land Company, LLC) The Villages of Southern Oaks - Phase 6B.

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Florida County/parish/borough: Sumter City: City of Wildwood
Center coordinates of site (lat/long in degree decimal format): Lat. 28.820445° N, Long. -81.979601° W.
Universal Transverse Mercator:

Name of nearest waterbody: Chitty Chatty Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lake Okahumpka
Name of watershed or Hydrologic Unit Code (HUC): Lake Okahumpka, 12 - 031002080703
[X] Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
[] Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

[] Office (Desk) Determination. Date:
[X] Field Determination. Date(s): June 7, 2018

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

[] Waters subject to the ebb and flow of the tide.
[] Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are and are not "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply): 1

- [] TNWs, including territorial seas
[] Wetlands adjacent to TNWs
[X] Relatively permanent waters2 (RPWs) that flow directly or indirectly into TNWs
[X] Non-RPWs that flow directly or indirectly into TNWs
[X] Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
[X] Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
[X] Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
[] Impoundments of jurisdictional waters
[X] Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or 0.84 acres.
Wetlands: 20.63 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):3

[X] Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands W1, W2, W3, W4, W5, W8, & W9, are considered isolated (SWANNC) and do not connect, nor are adjacent to, RPWs with no significant nexus. SW 8A, 8b, & 9A are surface waters excavated in dry land. Field investigations confirm that these excavated features do not have an apparent hydrologic connection

1 Boxes checked below shall be supported by completing the appropriate sections in Section III below.
2 For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
3 Supporting documentation is presented in Section III.F.

with, or serve to connect wetlands or other waters of the U.S. to the downstream TNW. These features are considered non-jurisdictional based on the preamble to 33 CFR Part 328 in the November 13, 1986, Federal Register (51 FR 41217, Section 328.3).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: _____

Summarize rationale supporting determination: _____

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": _____

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 57 square miles

Drainage area: square miles

Average annual rainfall: 51.9 inches

Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 2 tributaries before entering TNW.

Project waters are 2-5 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 1-2 aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: _____

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Identify flow route to TNW⁵: SW3(RPW) flows south offsite through a series of storm water ponds to Chitty Chitty Creek (RPW) which flows W/NW to Lake Okahumka (TNW) .
Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):

Average width: 5-7 feet
Average depth: 3-4 feet
Average side slopes: **2:1**.

Primary tributary substrate composition (check all that apply):

Silts Sands Concrete
 Cobbles Gravel Muck
 Bedrock Vegetation. Type/% cover:
 Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **6-10**

Describe flow regime:

Other information on duration and volume:

Surface flow is: **Confined**. Characteristics:

Subsurface flow: **Unknown**. Explain findings:

Dye (or other) test performed:

Tributary has (check all that apply):

Bed and banks
 OHWM⁶ (check all indicators that apply):
 clear, natural line impressed on the bank the presence of litter and debris
 changes in the character of soil destruction of terrestrial vegetation
 shelving the presence of wrack line
 vegetation matted down, bent, or absent sediment sorting
 leaf litter disturbed or washed away scour
 sediment deposition multiple observed or predicted flow events
 water staining abrupt change in plant community
 other (list):
 Discontinuous OHWM.⁷ Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by: Mean High Water Mark indicated by:
 oil or scum line along shore objects survey to available datum;
 fine shell or debris deposits (foreshore) physical markings;
 physical markings/characteristics vegetation lines/changes in vegetation types.
 tidal gauges
 other (list):

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain:

Identify specific pollutants, if known: Possibly impaired for bacteria and other microbes. Agricultural field are adjacent to the rpw so it is likely that nutrients, pesticides, and herbicides are within this waterbody.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings: observed wildlife utilizing waterbodies.

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: 5.32 acres

Wetland type. Explain: Palustrine Forested.

Wetland quality. Explain: Good.

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain:

Surface flow is: **Confined**

Characteristics:

Subsurface flow: **Unknown**. Explain findings:

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
 - Discrete wetland hydrologic connection. Explain: similarly situated on the landscape.
 - Ecological connection. Explain:
 - Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **2-5** river miles from TNW.

Project waters are **1-2** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters**.

Estimate approximate location of wetland as within the **50 - 100-year** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Water was clear.

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain: Trees, Shrubs, Herbs 75%.
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings: observed wildlife.

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **13**

Approximately (20.63) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
W-11A- Yes	1.42	W-10 – No	1.57
W-11B - Yes	2.51	W-11 - No	0.79
W-15 - No	1.29	W-11C - No	2.66
W-16 - No	1.29	W-12 – No	0.52
W-18 - No	0.01	W-13 – No	0.35
W-6 – No	0.62	W-14 – No	0.02
W-7 - No	1.18		

Summarize overall biological, chemical and physical functions being performed: Storage of flood waters; reduction of downstream peak discharges and volumes; recharge of aquifers; maintenance of seasonal/base flows; maintenance of groundwater supplies; removal of sediments and nutrients; provision of breeding grounds and wildlife habitat (e.g. feeding/foraging, nesting, spawning, rearing of young); supports diverse community of benthic invertebrates, a major food source for vertebrates.

Physical: The wetlands perform important flow maintenance functions including storage of flood waters and a release of these waters into the tributary in a more even and consistent manner. Therefore, the wetlands directly affect the duration, frequency, and volume of flow in the tributary and the downstream navigable water. The wetlands reduce local flooding. Storage of surface waters provides groundwater recharge that contributes to base flow in the tributary that is vital to sustain aquatic life in downstream waters.

Chemical: The wetlands improve water quality by removing sediment and nutrients that would otherwise reach downstream waters and have a negative effect on aquatic resources.

Biological: The wetlands are of utmost importance biologically since the majority of other non-wetland areas in the watershed have been altered for agriculture, residential, or other purposes. These wetlands have a high abundance and diversity of species due to their transitional location between terrestrial and aquatic systems. Productivity in downstream waters can depend on the exchange of nutrients within the floodplains. Watersheds dominated by riparian wetlands export a large amount of carbon that is essential to downstream ecosystems. Particulate carbon is important for shredders and filter feeders while dissolved carbon is important for microorganisms within these systems.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: SW-1, SW-2, SW-7A & SW-13A.

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

- TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
 Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: **Approx. 760 feet** linear feet **approx 3-7** width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters:

3. **Non-RPWs⁸ that flow directly or indirectly into TNWs.**

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters:

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
 Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: **3.93** acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **1.39** acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: **7.71** acres.

7. **Impoundments of jurisdictional waters.⁹**

⁸See Footnote # 3.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: 3.51 acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: 0.13 acres. List type of aquatic resource: Upland Cut Ditches.
- Wetlands: 4.09 acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

- USGS NHD data.
- USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: .
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is:63.8 (National Geodectic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date):1960, 1969, 1984, 2006, 2010, 2016, 2018.
or Other (Name & Date):Applicant submitted.
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: See Exhibit 1.

Exhibit 1: Description of Jurisdictional and Non-Jurisdictional Waters (SAJ-2018-01144)

1. Jurisdictional Wetlands and Waters: The Corps utilized the guidance provided in the *Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States* (Guidance) and 33 CFR 328.3(a) to identify which waters in the review area are properly subject to Corps jurisdiction. The Corps found that there are and are not jurisdictional waters within the review area.

A. Chitty Chatty Creek: RPW that flows directly to a TNW

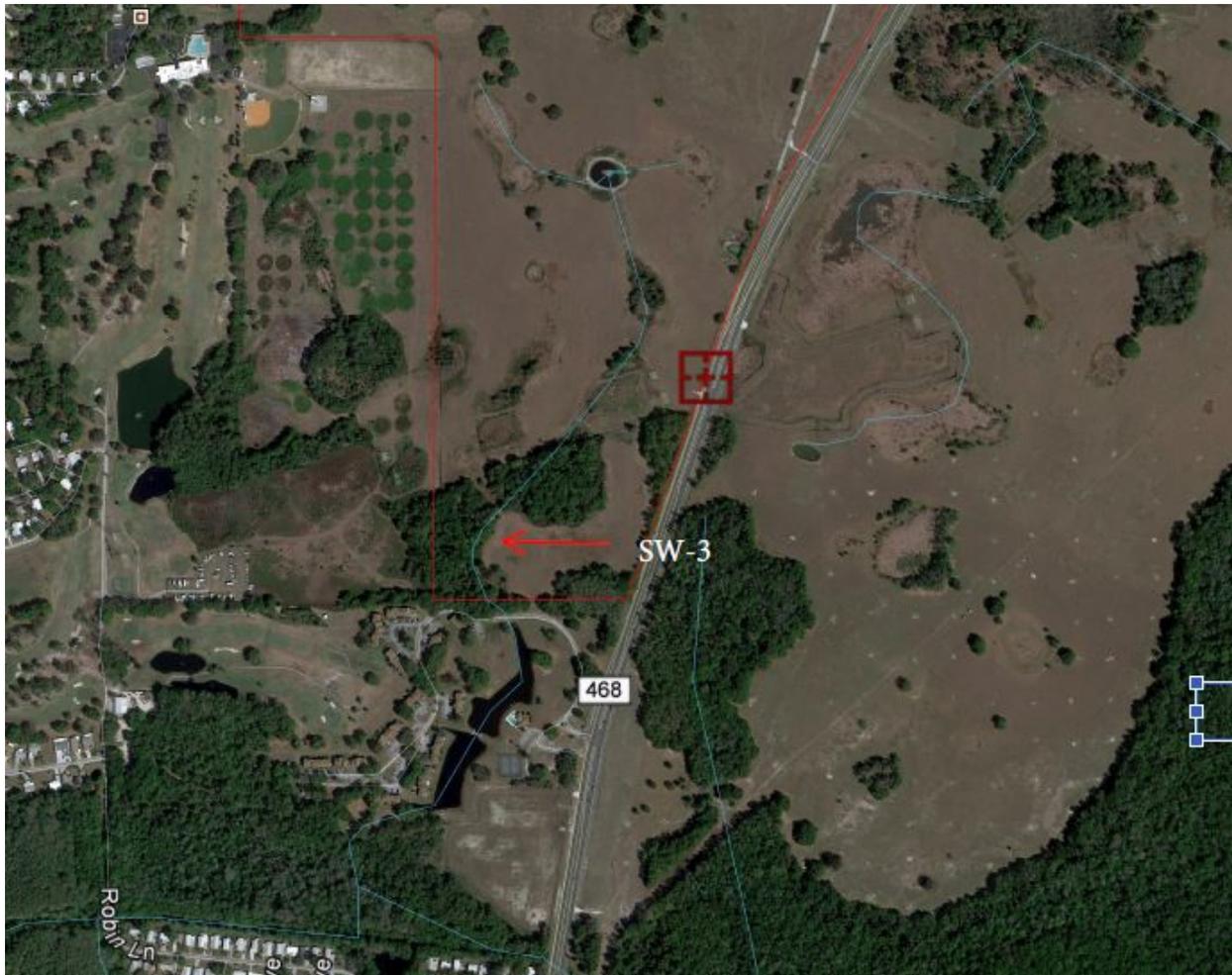
The Corps determined that Chitty Chatty Creek is a relatively permanent water (RPW) that flows directly to a TNW. The Guidance states that the Corps should exert jurisdiction over non-navigable tributaries of traditional navigable waters (TNW) that are relatively permanent where the tributaries typically flow year round or have continuous flow at least seasonally. The Corps determined that Chitty Chatty Creek satisfies this standard, and is a jurisdictional RPW. First, the Corps confirmed via aerial imagery and hydrography flow line data that Chitty Chatty Creek flows directly to Lake Okahumpka.



B. SW3: RPW that flows indirectly to a TNW.

The Corps determined that SW3 is an RPW that flows indirectly to Chitty Chatty Creek an offsite RPW which flows to a TNW – Lake Okahumpka. The Guidance states that the Corps should exert jurisdiction over non-navigable tributaries of TNW that are relatively permanent where the tributaries typically flow year round or have continuous flow at least seasonally. During the site visit, defined bed, bank, and flow was observed. The

DAREMS report indicated that the rain fall for the year was normal so it was determined that the factors of the feature would meet the criteria. The Corps determined that SW-3 satisfies this standard, and is a jurisdictional RPW.



C. SW1, SW2, SW7A, SW13A: Non-RPW that flows directly to a TNW.

The Corps determined that SW1, SW2, SW7A, SW13A are a non-relatively permanent (non-RPW) water that flows directly to a TNW. The Guidance states that the Corps should exert jurisdiction over non Waters navigable tributaries of traditional navigable waters that are not relatively permanent. The Corps is required to perform a significant nexus analysis to assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream TNW. Florida is in the Eleventh Circuit and the Eleventh Circuit has concluded that the Kennedy standard is the sole method of determining CWA jurisdiction in that Circuit. Therefore, unless the aquatic resources are TNW or wetlands adjacent to TNWs, the Corps needs to conduct a significant nexus determination on all other waters in order to

determine jurisdiction under the CWA. *United States v. McWane, Inc., et al.*, 505 F.3d 1208 (11th Cir. 2007). The Corps has determined that for this review, SW1, SW2, SW7A, SW13A has more than an insubstantial or speculative effect on the physical, chemical, and biological integrity of the downstream TNW, as described in Section III(C) of the Rapanos form. The Corps determined that SW1, SW2, SW7A, SW13A satisfies this standard, and is a jurisdictional Non-RPW.

First, the Corps confirmed via current and historical aerial imagery and by personal observation that SW1 conveys water from W-11C to W-11B, SW2 conveys water from W11 to W11B which then flows in SW3, an RPW. SW7A conveys water from W7 to W10 eventually reaching SW1 and SW13A conveys water from W13 to W12 to W11 to SW2 then into SW3.

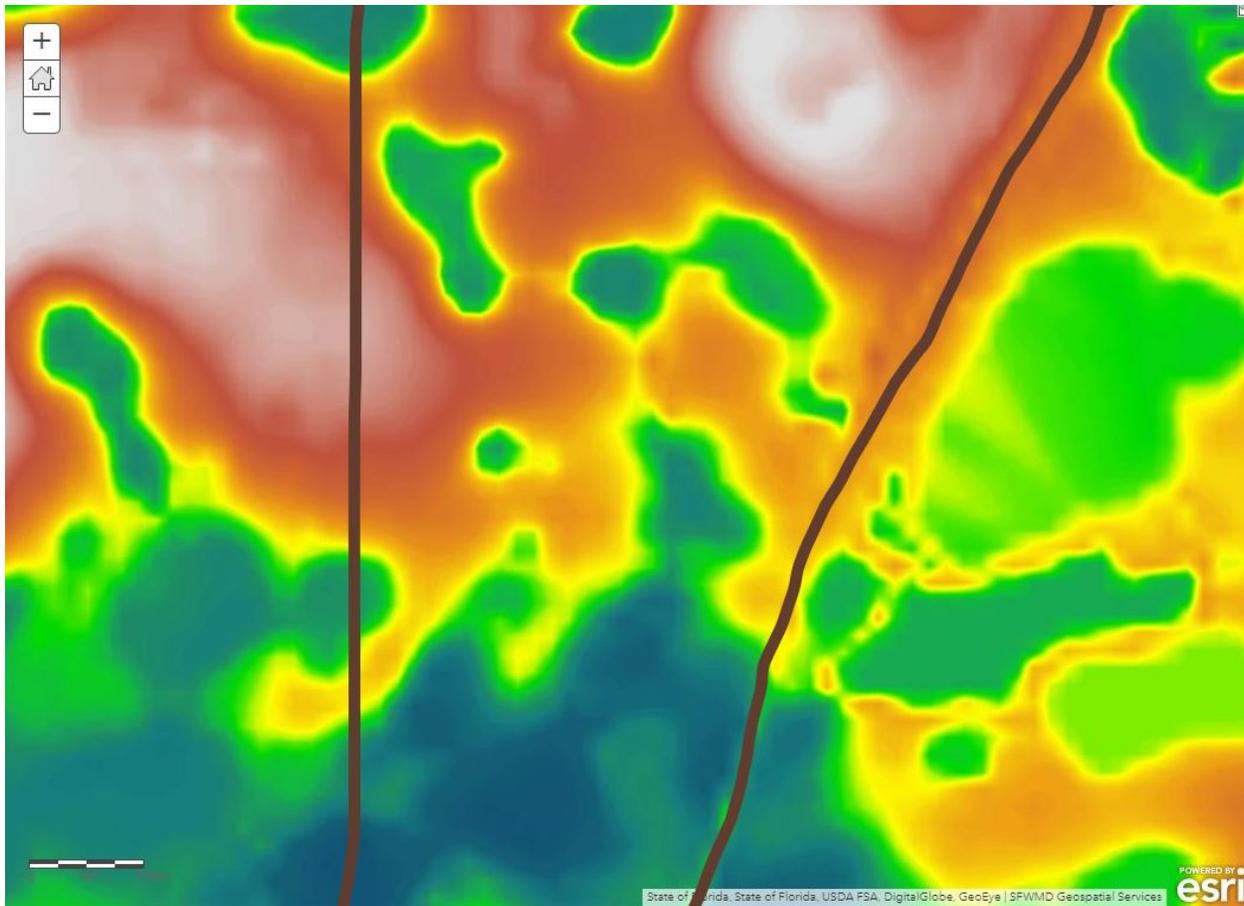
Second, SW1, SW2, SW7A, SW13A conveys water, sediment, nutrients, pollutants, and carbon, providing a path for excess flood water from W7 and W13 through the onsite system to SW3 then offsite. The adjacent wetlands perform important flow maintenance functions including storage of flood waters and a release of these waters into the tributary in a more even and consistent manner.

Therefore, the wetlands directly affect the duration, frequency, and volume of flow in the tributary and the downstream navigable water. Thus, SW1, SW2, SW7A, SW13A has more than an insubstantial or speculative effect on the physical, chemical, and biological integrity of the downstream TNWs.

D. Wetlands 11A, 11B, 15, 16, & 18: Wetlands abutting or adjacent to RPWs that flow directly or indirectly into TNWs.

According to the Guidance alone, the Corps should exert jurisdiction over those adjacent wetlands that have a continuous surface connection to RPWs (e.g., they are not separated by uplands, a berm, dike, or similar feature). W11A, W11B, W15, W16, and W18 are directly connected to SW-3 which is a RPW. SW-3 connects through a series of offsite stormwater ponds to wetlands and Chitty Chatty Creek.

Additionally, this surface water connection can be seen through Light Detection and Ranging (LIDAR).



Approx. Property Boundary

E. Wetlands 6, 7, 10, 11, 11C, 12, 13, & 14: Wetlands abutting or adjacent to non-RPWs that flow directly or indirectly into TNWs.

The Corps is required to perform a significant nexus analysis to assess the flow characteristics and functions of the wetland’s themselves and the functions performed by all wetlands adjacent to non-rpw’s to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters. Florida is in the Eleventh Circuit and the Eleventh Circuit has concluded that the Kennedy standard is the sole method of determining CWA jurisdiction in that Circuit. Therefore, unless the aquatic resources are traditional navigable waters or wetlands adjacent to traditional navigable waters, the Corps needs to conduct a significant nexus determination on all other waters in order to determine jurisdiction under the CWA. *United States v. McWane, Inc., et al.*, 505 F.3d 1208 (11th Cir. 2007).

The Corps has determined that for this review, wetlands 6, 7, 10, 11, 11C, 12, 13, & 14 have more than an insubstantial or speculative effect on the physical, chemical, and biological integrity of the downstream TNW, as described in Section III(C) of the Rapanos form. The Corps determined that wetlands 6, 7, 10, 11, 11C, 12, 13, & 14

satisfies this standard, and are considered “Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.” These wetlands do not directly abut an RPW but are adjacent with similarly situated adjacent wetlands.

First, the Corps confirmed via current and historical aerial imagery and review of nearby jurisdictional determinations from other Corps projects that the route of hydrological flow is conveyed to an onsite RPW (SW3) and eventually to Chitty Chatty Creek (RPW) to Lake Okahumka (TNW).

The following are the types of wetlands identified as jurisdictional;

Freshwater Marsh

Physical: The wetlands perform important flow maintenance functions including storage of flood waters^{1, 2} and a release of these waters into the tributary in a more even and consistent manner². Therefore, the wetlands directly affect the duration, frequency, and volume of flow in the tributary and the downstream navigable water². The wetlands reduce local flooding¹. Storage of surface waters provides groundwater recharge that contributes to baseflow in the tributary that is vital to sustain aquatic life in downstream waters¹.

Chemical: The wetlands improve water quality by removing sediment and nutrients that would otherwise reach downstream waters and have a negative effect on aquatic resources^{1, 2}.

Biological: The wetlands are of utmost importance biologically since the majority of other non-wetland areas in the watershed have been altered for agriculture, residential, or other purposes¹. These wetlands provide breeding grounds for species that cannot reproduce in faster-moving water and move between wetlands and uplands over their lifecycle¹. The wetland, along with the tributary system, provide wildlife habitat (e.g. feeding, nesting, spawning, rearing of young) for many aquatic species that live in traditional navigable waters². The wetlands also maintain a more consistent water temperature in tributaries, which is important to many aquatic species².

Palustrine Forested (Broad Leaf Deciduous)

Physical: The wetlands perform important flow maintenance functions including storage of flood waters^{1, 2} and a release of these waters into the tributary in a more even and consistent manner². Therefore, the wetlands directly affect the duration, frequency, and volume of flow in the tributary and the downstream navigable water². These wetlands offer the following benefits to downstream aquatic resources: reduction of downstream peak discharge and volume, recharge of aquifers, maintenance of seasonal/baseflows, maintenance of groundwater supplies¹. In fact, cypress swamps appear to have lower evapotranspiration rates than surrounding ecosystems and may, therefore, provide more recharge to the aquifer³.

Chemical: The wetlands improve water quality by removing sediment and nutrients (particularly phosphorous and nitrogen) that would otherwise reach downstream waters and have a negative effect on aquatic resources^{1, 2, 3}. In general, almost all organic matter and nutrients from wastewater flows inflows are removed or stored within the substrate of the wetland¹.

Biological: The wetlands are of utmost importance biologically since the majority of other non-wetland areas in the watershed have been altered for agriculture, residential, or other purposes¹. These wetlands provide breeding grounds for species that cannot reproduce in faster-moving water and move between wetlands and uplands over their lifecycle¹. The wetlands also maintain a more consistent water temperature in tributaries, which is important to many aquatic species². The wetland, along with the tributary system, provide wildlife habitat (e.g. feeding, nesting, spawning, rearing of young) for many aquatic species that live in traditional navigable waters². These wetlands have a diverse community of benthic invertebrates, a major food source for vertebrates³.

References

¹The Clean Water Act Jurisdictional Handbook. 2007. Environmental Law Institute, Washington, DC, 77 pp.

²Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States. 2007. US Department of the Army and US Environmental Protection Agency. 12 pp.

³Ewel, K.C. 1990. Multiple demands on wetlands. *Bioscience*, 40:660-666.

F. Non-Jurisdictional Waters and Wetlands

The Corps determined that there are several waters and wetlands within the review area that are non-jurisdictional for the reasons discussed below.

1. Wetlands and Surface Waters

The review area contains seven wet prairie depressional wetlands and three upland cut ditches that the Corps determined are non-jurisdictional isolated wetlands/waters. The wetlands/waters listed below are non-navigable, intrastate waters for which the only potential basis for the exercise of Corps jurisdiction would be migratory bird use. Migratory bird use by itself is not a sufficient basis for the exercise of CWA regulatory jurisdiction (*Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001)). These wetlands were historically connected through upland cut ditches. The land was manipulated so that filled crossings were installed in 3 different locations thus removing connection. No culverts were found during the field visit that would allow a flow to reach other areas of the property. These wetlands are not

connected to downstream features. There is no evidence of surface flow to other downstream features. Ordinary High Water Marks (OHWM) were observed and did show evidence of fluctuation within the wetland limits.

Wetland	Size (acres)
1	1.11
2	0.66
3	1.74
4	0.13
5	2.08
8	1.52
9	0.36
Total:	7.6

SW	Size (acres)
8A	0.07
8B	0.04
9A	0.02
Total:	0.13

Reference attached figures.

The Corps determined that none of these waters are navigable-in-fact. Also, none of these waters are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, and are not subject to the ebb and flow of the tide (33CFR328.3(a)(1)).

The Corps determined that none of these wetlands are interstate waters or wetlands. None of these wetlands straddle an interstate boundary. Therefore, none of these wetlands satisfy the criteria provided in 33 CFR 328.3(a)(2).

These wetlands are located entirely within private property and could not be used by foreign or interstate travelers for recreational or other purposes, these wetlands do not support fisheries that could be taken and sold in interstate or foreign commerce, and there is no industrial use for these wetlands in interstate commerce. Thus, no use or degradation of these waters could directly affect interstate commerce. Therefore, none of these wetlands satisfy the criteria provided in 33 CFR 328.3(a)(3).

The Corps determined that none of these wetlands are impoundments of waters otherwise defined as waters of the U.S. Therefore, none of these wetlands satisfy the criteria provided in 33 CFR 328.3(a)(4).

The Corps determined that none of the waters listed above are tributaries of waters defined in 33 CFR 328.3(a)(1-4). None of these waters show evidence of conveying water to downstream features. Thus, none of these wetlands satisfy 33 CFR 328.3(a)(5).

The Corps determined that none of these inland wetlands are subject to the ebb and flow of the tide. Therefore, none of these waters could be defined as the territorial seas, and thus satisfy 33 CFR 328.3(a)6.

The Corps determined that none of these wetlands are adjacent to any water of the United States as defined by 33 CFR 328.3(a) (1-6).

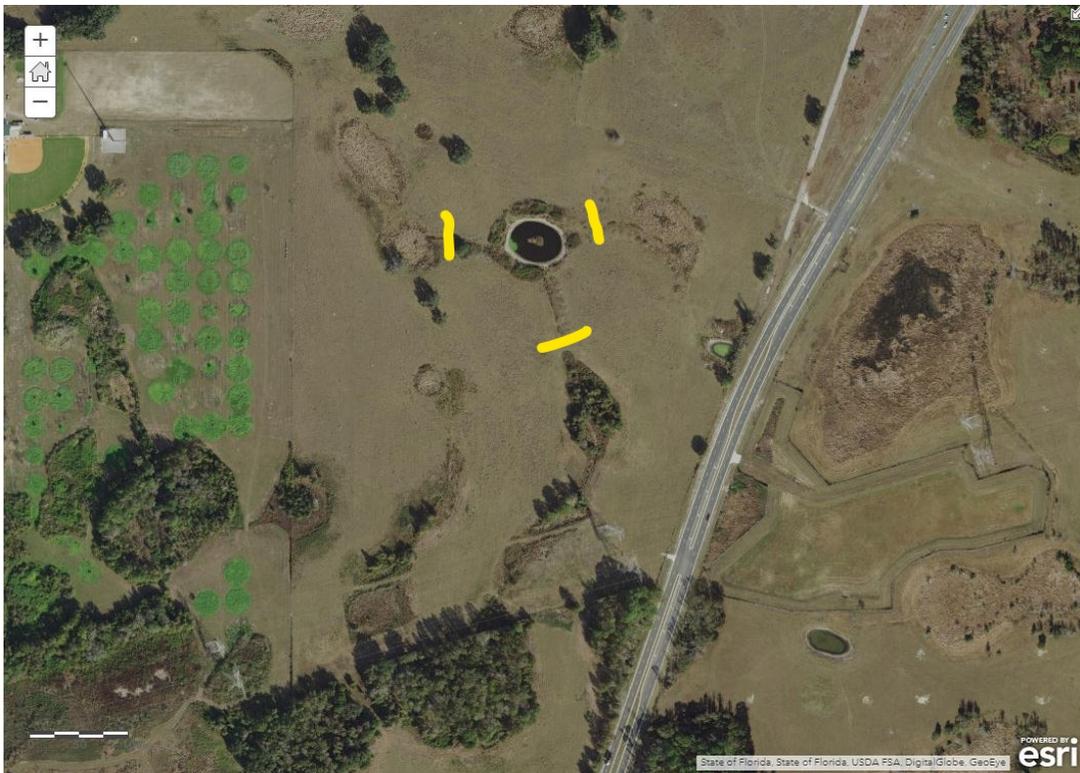
None of these wetlands could be categorized as adjacent to the nearest traditional navigable water. The nearest TNW is Lake Okahumpka. The review area is located 1.25 miles east of this TNW. These wetlands do not possess any of the three criteria provided in the current guidance. These wetlands does not exhibit a continuous surface connection with any RPW. These wetlands does not directly abut any RPW. The Corps determined that none of these wetlands touch or share a common border with any RPW. Thus, the standard for adjacency to an RPW provided in the Guidance is not satisfied in these wetlands. The Corps determined that W1, W2, W3, and W9 are so distinct from the RPW and non-RPW's in aerial distance and boundary that they should not be considered adjacent to the RPW or non-RPW's onsite.

Therefore, the Corps determined that these wetlands do not satisfy the criteria provided in 33 CFR 328.3(a)(7).

The wetlands listed above are non-navigable, intrastate waters for which the only potential basis for the exercise of Corps jurisdiction would be migratory bird use. Migratory bird use by itself is not a sufficient basis for the exercise of CWA regulatory jurisdiction (*Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001)). Thus, the Corps determined that these wetlands are not waters of the United States, and are not jurisdictional.



1960 Aerial of Subject Property.



Aerial showing filled in areas.

JURISDICTIONAL
WETLAND

Impact Activity Area (AA) #	Wetland Acres (AC)	Impact Acres (AC)
Wetland 6	0.62	
Wetland 7	1.18	
Wetland 10	1.57	
Wetland 11	0.79	
Wetland 11A	1.42	
Wetland 11B	2.51	
Wetland 11C	2.66	
Wetland 12	0.52	
Wetland 13	0.35	
Wetland 14	0.02	
Wetland 15	1.29	
Wetland 16	0.09	
Wetland 18	0.01	
TOTAL	13.03	

JURISDICTIONAL
WATERS

Impact Activity Area (AA) #	Wetland Acres (AC)	Impact Acres (AC)
SW 1	0.08	
SW 2	0.05	
SW 3	0.32	
SW 7A	0.14	
SW 13A	0.12	
TOTAL	0.71	

ISOLATED/NON-
JURISDICTIONAL
WETLAND

Wetland 1	1.11	
Wetland 2	0.66	
Wetland 3	1.74	
Wetland 4	0.13	
Wetland 5	2.08	
Wetland 8	1.52	
Wetland 9	0.36	
Total	7.6	

ISOLATED/NON-
JURISDICTIONAL
SURFACE WATERS

SW 8A	0.07	
SW 8B	0.04	
SW 9A	0.02	
Total	0.13	



Jurisdictional Waters:
SW1, SW2, SW3, SW7A, and
SW13A

Jurisdictional Wetlands:
W6, W7, W10, W11, W11A,
W11B, W11C, W12, W13,
W14, W15, W16, and W18

Non-Jurisdictional Waters:
SW8A, SW8B, and SW9A

Non-Jurisdictional Wetlands:
W1, W2, W3, W4, W5, W8,
and W9

W2
(0.66 ac)

W2-WET

Up4BW

W3

(1.74 ac)

W3-WET

W1

(1.11 ac)

Sw1-WET

W4

(0.13 ac)

W4-WET

W5

(2.08 ac)

W5-WET

W7

(1.18 ac)

Sw7-WET

SW8A

(0.07 ac)

W8

(1.52 ac)

SW8B

(0.04 ac)

W8-WET

SW9A

(0.02 ac)

Sw9-WET

W9

(0.36 ac)

W13

(0.35 ac)

W13-WET

W14

(0.02 ac)

W14-WET

SW13A

(0.12 ac)

W-10

(0.06 ac)

W-10

(1.1 ac)

W10-WET

W-10

(0.05 ac)

W6

(0.62 ac)

W6-WET

W-12

(0.01 ac)

W12W

(0.51 ac)

W-12

(0.08 ac)

SW-1

(0.08 ac)

W-11C

(1.16 ac)

W-11C

(1.5 ac)

W-11B

(0.19 ac)

W-11

(0.79 ac)

Up1 BW

(0.05 ac)

SW-2

(0.05 ac)

W11W 641

(0.79 ac)

W11W 617

(2.32 ac)

W17-WET

W-11A

(1.42 ac)

Sw16-WET

W16

(0.09 ac)

SW-3

(0.32 ac)

Up2BW

(0.29 ac)

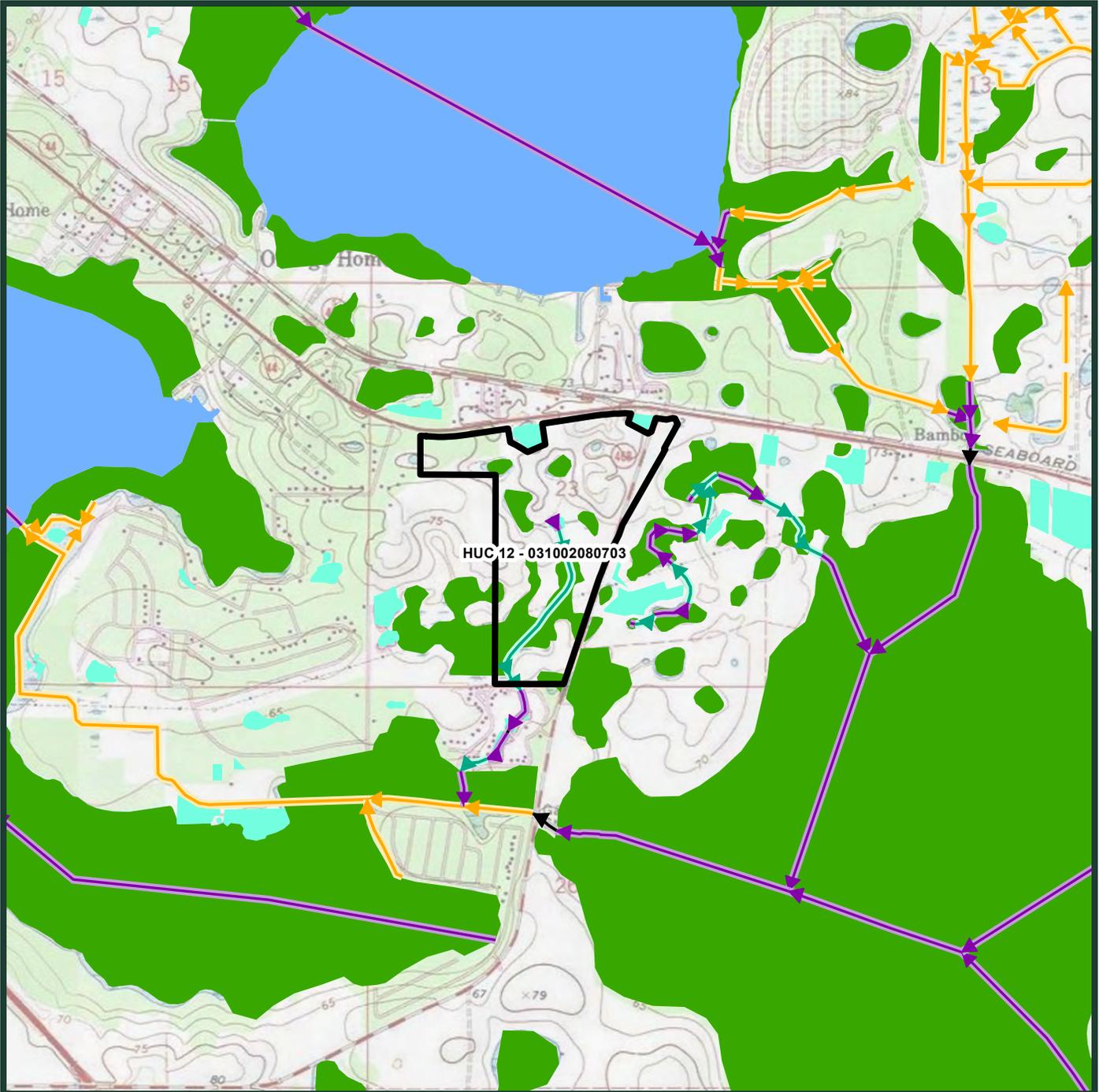
W15-WET

W15

(1.29 ac)

W18

(0.01 ac)



HUC 12 - 031002080703

Legend

Project Boundary (136.36 ac)	NHD Flowlines
HUC 12 Watershed Boundary	Artificial Path
NHD Waterbodies	Canal Ditch
Lake/Pond	Connector
Reservoir	Stream/River
Swamp/Marsh	

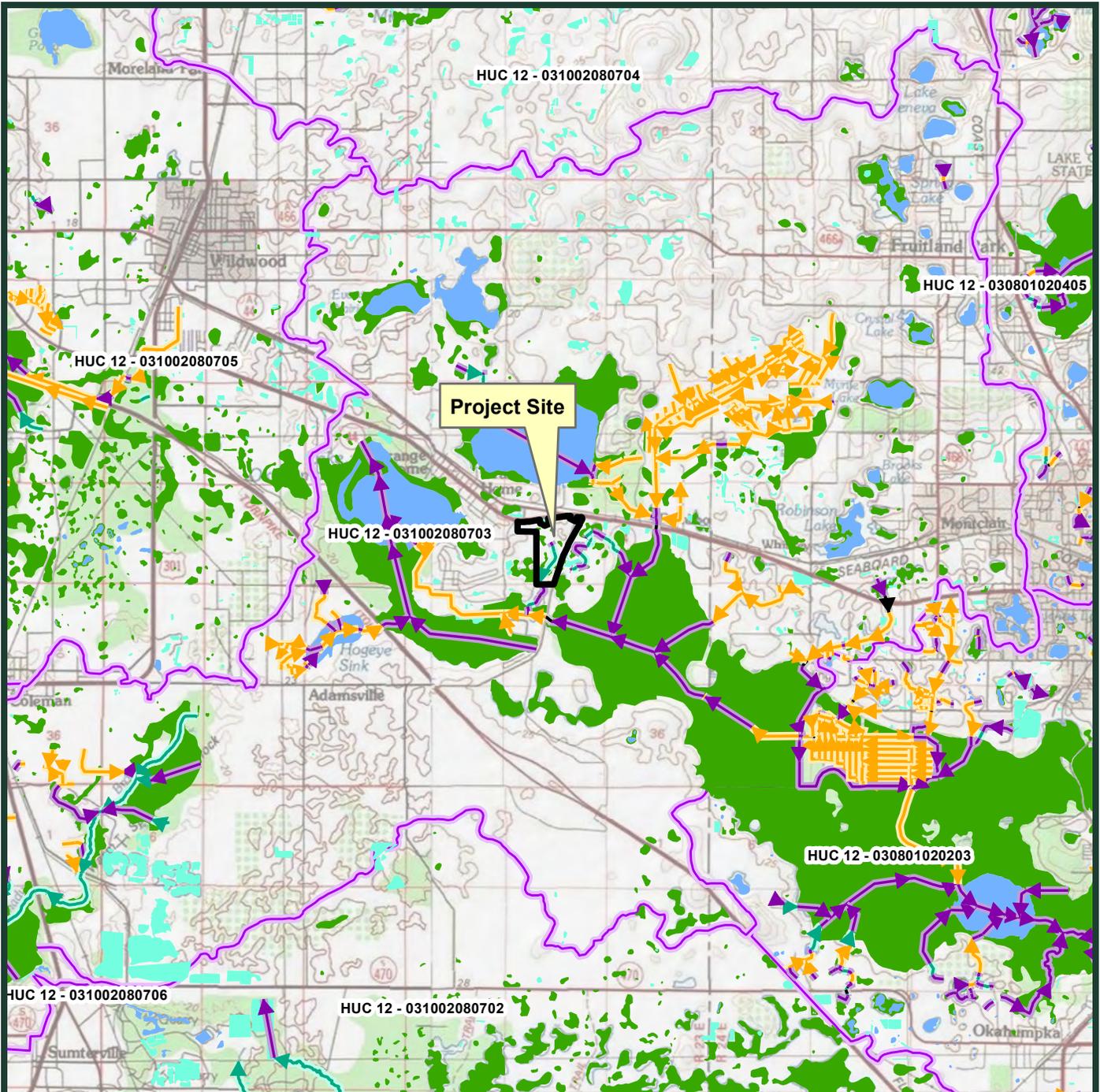
Source: Boundary provided by Farmer Barley; 20171204. Topo and NHD data streamed from ESRI.

Wildwood
Leesburg
Lake Panasoffkee

0 1,000 2,000
Feet
1 inch = 2,000 feet

EXHIBIT 2A
NATIONAL HYDROGRAPHY DATASET (NHD) MAP FOR VOSO PHASE 6B,
CITY OF WILDWOOD, FLORIDA

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Legend

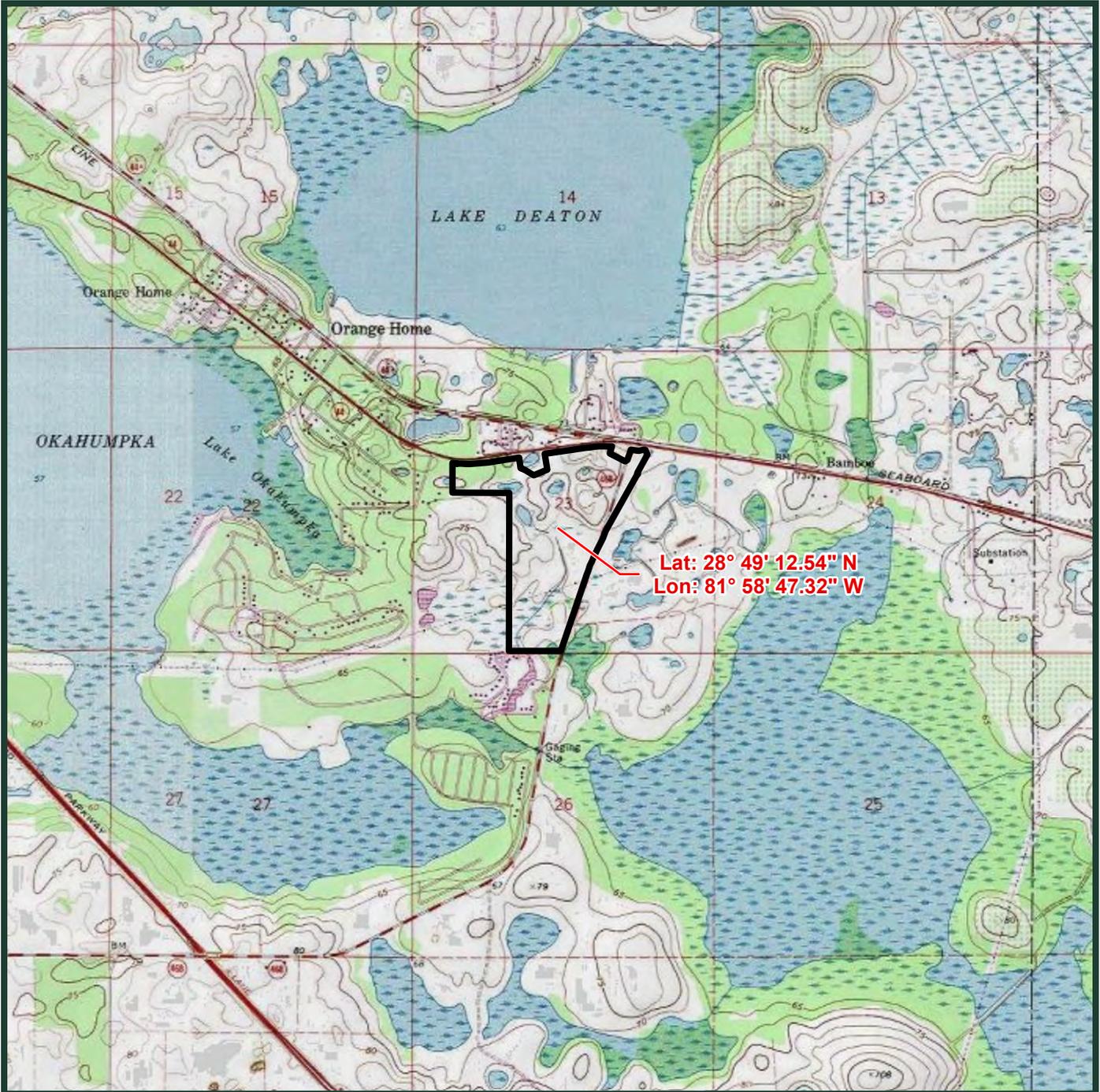
- | | |
|------------------------------|-----------------|
| Project Boundary (136.36 ac) | NHD Flowlines |
| HUC 12 Watershed Boundary | Artificial Path |
| NHD Waterbodies | Canal Ditch |
| Lake/Pond | Connector |
| Reservoir | Pipeline |
| Swamp/Marsh | Stream/River |

Source: Boundary provided by Farmer Barley; 20171204. Topo and NHD data streamed from ESRI.



**EXHIBIT 2B
NATIONAL HYDROGRAPHY DATASET (NHD) MAP OF VOSO PHASE 6B,
CITY OF WILDWOOD, FLORIDA.**

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Legend

 Project Boundary (136.36 ac)

Source: Carter Boundary provided by Farmer Barley; 20161215. USGS Leesburg West Fla. Quadrangle streamed from ESRI.

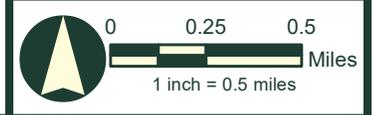
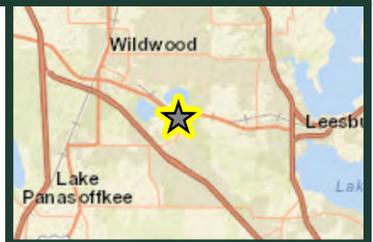
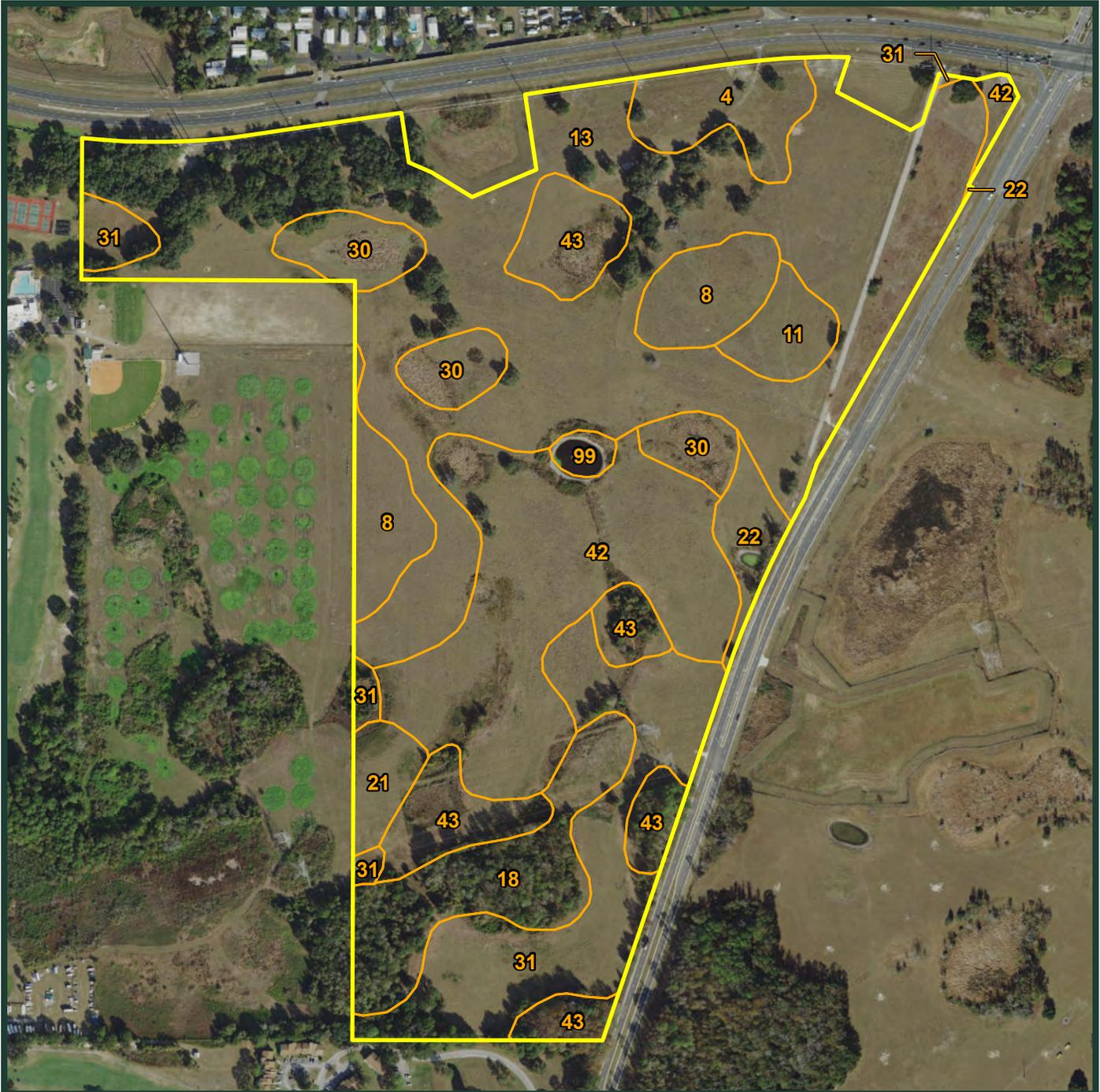


EXHIBIT 3
LOCATION OF VOSO PHASE 6B, (SECTION 23, TOWNSHIP 19 S
RANGE 23 E), CITY OF WILDWOOD, FLORIDA.

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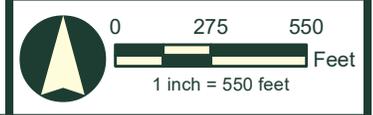
Legend

Project Boundary (136.36 ac)

NRCS Soils

- 11 - Millhopper sand, 0 to 5 percent slopes (2.46 ac)
- 13 - Tavares fine sand, 0 to 5 percent slopes (55.13 ac)
- 18 - Okeelanta muck (8.58 ac)
- 21 - EauGallie fine sand, bouldery subsurface (2.04 ac)
- 22 - Smyrna-Smyrna, wet, fine sand, 0 to 2 percent slopes (2.3 ac)
- 30 - Placid fine sand, depressional (6.19 ac)

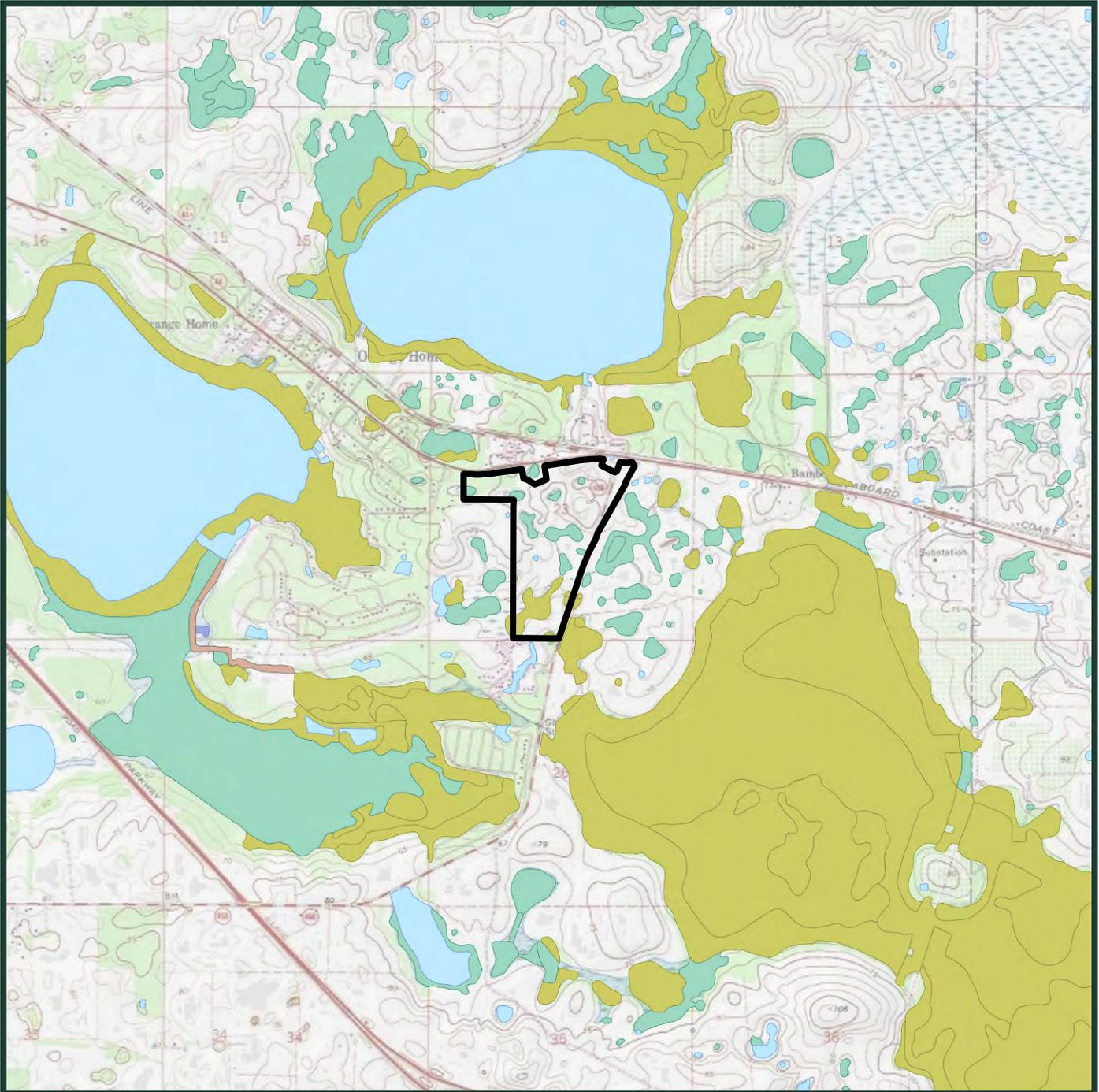
- 31 - Myakka-Myakka, wet, sands, 0 to 2 percent slopes (15.94 ac)
- 4 - Candler sand, 0 to 5 percent slopes (4.51 ac)
- 42 - Adamsville fine sand (21.22 ac)
- 43 - Basinger fine sand, depressional, 0 to 1 percent slopes (10.33 ac)
- 8 - Lake fine sand, 0 to 5 percent slopes (6.93 ac)
- 99 - Water (0.72 ac)



Source: Boundary provided by Farnar Barley; 20171204. Aerial streamed from ESRI.

EXHIBIT 4
NATURAL RESOURCES CONSERVATION SERVICE (NRCS) SOILS MAP OF
VOSO PHASE 6B, CITY OF WILDWOOD, FLORIDA

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Legend

Project Boundary (136.36 ac)

Wetlands

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Other

Riverine

Source: Boundary provided by Farmer Barley; 20171204. Aerial streamed from ESRI.

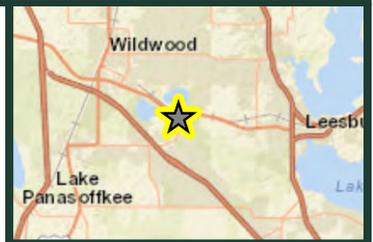


EXHIBIT 5
NATIONAL WETLAND INVENTORY DATA FOR VOSO PHASE 6B,
CITY OF WILDWOOD, FLORIDA.

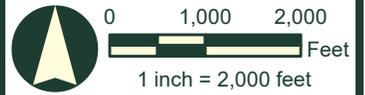
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Legend

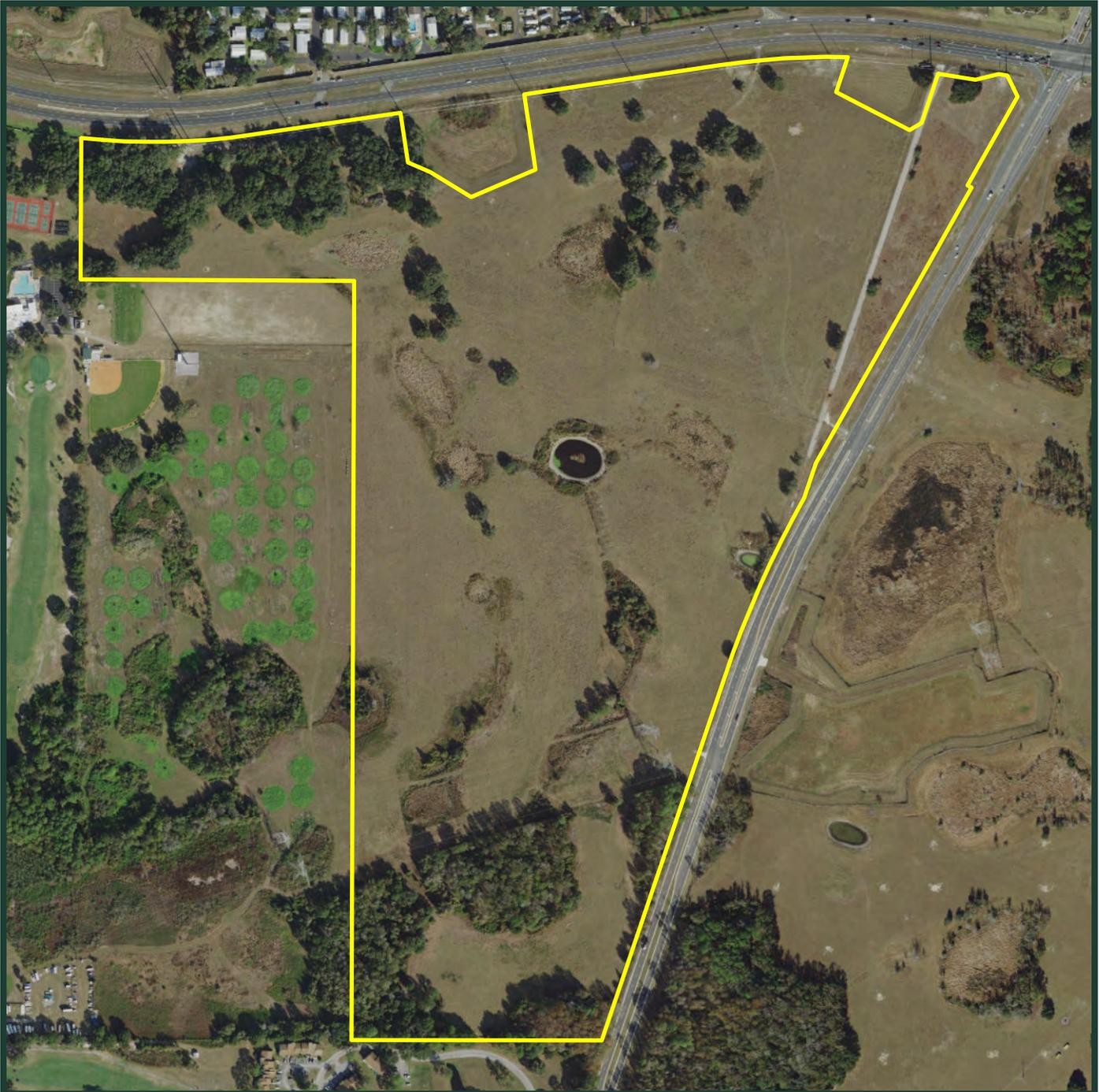
-  Project Boundary (136.36 ac)
-  100-Year Floodplain

Source: Boundary provided by Farmer Barley; 20171204. Topo streamed from ESRI.



**EXHIBIT 6
FEDERAL EMERGENCY MANAGEMENT AGENCY 100-YEAR FLOODPLAIN MAP
OF VOSO PHASE 6B, CITY OF WILDWOOD, FLORIDA.**

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Legend

 Project Boundary (136.36 ac)

Source: Boundary provided by Farmer Barley; 20171201. Aerial streamed from ESRI.

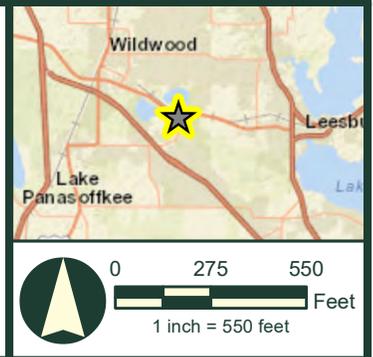


EXHIBIT 7
AERIAL PHOTOGRAPH OF VOSO PHASE 6B, CITY OF WILDWOOD, FLORIDA.

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