

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

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): SAJ-2016-00216**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Cocoa Regulatory Field Office, Cocoa, Florida, Waterleigh P.D. Phase 2, SAJ-2016-00216(SP-AWP)**

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:** The project is a 1,128 acre planned development situated at the southwest corner of the intersection of Old YMCA Road and Avalon Road (State Road 545), in Sections 6,7,8, & 18, Township 24 South, Range 27 East, Orange County, Florida

State:FL County/parish/borough: Orange City: Unincorporated Orange County, Florida

Center coordinates of site (lat/long in degree decimal format): Lat. 28.4149° **N**, Long. 81.6481° **W**.

Universal Transverse Mercator:

Name of nearest waterbody: Hickorynut Lake

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lake Marion Creek

Name of watershed or Hydrologic Unit Code (HUC): HUC 10 0309010105

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: August 5, 2016

Field Determination. Date(s): April 6, 2016

**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** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the **review area**

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area (check all that apply):<sup>1</sup>**

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

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

Impoundments of jurisdictional waters

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 / acres.

Non-wetland waters	Type	Acres
1 - Hickory Nut Lake	510	299
14	510	0.09
16	510	0.12
17	520	39.98
20	520	0.39

<sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup> 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).

Wetlands: No wetlands have been identified.

- c. **Limits (boundaries) of jurisdiction** based on: 1987 Delineation Manual  
Elevation of established OHWM (if known):.

2. **Non-regulated waters/wetlands (check if applicable):**<sup>3</sup>

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands 15,18, and 42 totaling 0.61 acre, are isolated wetlands within the review area. The subject wetlands are surrounded by upland vegetation and do not have any physical, chemical, or biological connections to waters of the United States. Sandy soils surrounding the wetlands allow the downward movement of water to the surficial aquifer. Geomorphic conditions appear to reduce the opportunity for lateral movement by subsurface flow to any nearby intermittent tributaries (i.e. swales, ditches). Give the absence of a factual determination of subsurface flow, or a substantial nexus to commerce, these wetlands were determined to be isolated consistent with SWANCC and the "Migratory Bird Rule".

### 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 waterbody<sup>4</sup> 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: Reedy Creek Watershed (Source: Orange County Water Atlas)

Drainage area: 73.9 Square Miles

Average annual rainfall: inches 50

<sup>3</sup> Supporting documentation is presented in Section III.F.

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

Average annual snowfall: 0 inches

(ii) **Physical Characteristics:**

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 2 tributaries (unnamed waterway with its associated wetlands and lakes flow into Reedy Creek and then TNW.)

Project waters are 25 river miles from TNW.

Project waters are 0 river miles from RPW.

Project waters are 17 aerial (straight) miles from TNW.

Project waters are 0 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. NO:.

Identify flow route to TNW: From Hickorynut Lake water flows east and south through unnamed waterway or creek to Panther Lake and its associated wetlands to Lake Lartigue and its associated wetlands to Reedy Creek which eventually flows into Lake Marion Creek and Lake Hatchineha.

Tributary stream order, if known: one

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

**Tributary is:**  Natural

Artificial (man-made). Explain: There are some areas of the tributary that flow from Hickorynut Lake to Reedy Creek that have been either manipulated into ditches or that have been created by ditching.

Manipulated (man-altered). See note above.

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

Average width: Varies from a couple thousand feet in the lake to 30-40 feet wide in the ditches and creeks that flow to Reedy Creek.

Average depth: varies

Average side slopes: varies

Primary tributary substrate composition (check all that apply):

Silts

Sands

Concrete

Cobbles

Gravel

Muck

Bedrock

Vegetation. Type/% cover: 0 to 100%

Other. Explain: These area assumptions based on experience with the area..

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

Presence of run/riffle/pool complexes. There are runs, riffles and pools along the tributaries path to the TNW.

Tributary geometry: straight to meandering

Tributary gradient (approximate average slope): Fairly Flat

(c) Flow:

Tributary provides for: Seasonal Flow

Estimate average number of flow events in review area/year: 8 to 10 or more

Describe flow regime:

Other information on duration and volume: unknown

Surface flow varies.

Subsurface flow: Unknown. Explain findings: No finding.

Dye (or other) test performed: None Conducted.

Tributary has (check all that apply):

Bed and banks

OHWM<sup>5</sup> (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

<sup>5</sup>A 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.

- sediment deposition
- water staining
- other (list): Based on past experience with similar waterbodies in the Central Florida area this water path will contain a variety of soils, vegetation and indicators of water flow along its path to the TNW.
- multiple observed or predicted flow events
- abrupt change in plant community

Discontinuous OHWM.<sup>6</sup> 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:
  - oil or scum line along shore objects
  - fine shell or debris deposits (foreshore)
  - physical markings/characteristics
  - tidal gauges
  - other (list): Review of Aerial Maps on Google Earth.
- Mean High Water Mark indicated by:
  - survey to available datum;
  - physical markings;
  - vegetation lines/changes in vegetation types.

**(iii) Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).  
 Explain: Water color is clear in the Hickorynut Lake and its tributary on most days. Water quality data from 2005-2009 shows water is clear (2.0 m secchi depth), dissolved oxygen averages 6.1 ppm, pH is 6.4, total Nitrogen is 0.74, phosphorus is 0.001 ppm, conductivity is 147 umhs/cm, turbidity is 1.7 NTU's and hardness is 31 ppm. This soft oligotrophic water is indicative of surficial aquifer discharge from the sandhills which form the contributing basin. This water is very similar in characteristics to downstream waters at the USGS Gauging Station 02266300 in Reedy Creek.

Identify specific pollutants: Not Known

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

- Riparian corridor. Characteristics (type, average width): varies.
- Wetland fringe. Characteristics: .
- Habitat for:
  - Federally Listed species. Explain findings: sand skinks have been confirmed in the upland resources adjacent to wetlands, indigo snakes are expected to utilize the wetland and upland features of the site.
  - Fish/spawn areas. Explain findings Hickory Nut.
  - Other environmentally-sensitive species. Explain findings:
  - Aquatic/wildlife diversity. Explain findings: Bass, perch, crappie, brim, catfish, frogs.

**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: acres
- Wetland type. Explain:.
- Wetland quality. Explain:.

Project wetlands cross or serve as state boundaries. Explain: no.

**(b) General Flow Relationship with Non-TNW:**

Flow is: Explain:.

Surface flow is:

Characteristics:

Subsurface flow: **Pick List**. Explain findings: .

Dye (or other) test performed: .

**(c) Wetland Adjacency Determination with Non-TNW:**

- Directly abutting
- Not directly abutting
  - Discrete wetland hydrologic connection. Explain: .
  - Ecological connection. Explain: .
  - Separated by berm/barrier. Explain: .

**(d) Proximity (Relationship) to TNW**

Project wetlands are river miles from TNW.  
 Project waters are aerial (straight) miles from TNW.  
 Flow is from:.  
 Estimate approximate location of wetland as within the floodplain.

<sup>6</sup>Ibid.

**(ii) Chemical Characteristics:**

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

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.
- Habitat for:
  - Federally Listed species. Explain findings.
  - Fish/spawn areas. Explain findings.
  - Other environmentally-sensitive species. Explain findings.
  - Aquatic/wildlife diversity. Explain findings.

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

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

Approximately ( ) 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>

Summarize overall biological, chemical and physical functions being performed: The review area includes a total of 824 acres of wetlands and non-wetland waters. This includes palustrine (465 acres) and lacustrine (359 acres). These aquatic systems provide habitat for wildlife, perform flood storage and drainage for the surrounding areas, water quality treatment and baseflow to Reedy Creek, and food web support for the Kissimmee River watershed.

**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 food webs?
- 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.**
- **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:
- **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: Wetland 20 appears to be hydrologically connected to Hickory Nut Lake through a series of interconnected wetlands and non-wetland waters.
- **4. Significant nexus findings for wetlands directly abutting an RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its abutting wetlands, then go to Section III.D:

5. **Significant nexus findings for an RPW (perennial or seasonal).** Explain findings of presence or absence of significant nexus below, based on the tributary, then go to Section III.D:

Hickorynut Lake with its tributaries and associated side lakes and wetlands that connect to Reedy Creek, and ultimately to Lake Hatchineha, provide a variety of habitat and lifecycle support functions. These functions include but are not limited to feeding, nesting, spawning, or areas to rear young for a variety of species such as fish, amphibians, snakes, reptiles, birds, and mammals. These species are present along the path of the waterway to and including the lakes that receive their waters. Extensive development has occurred in the region prior to stormwater permitting rules and these waterbodies and wetlands help to reduce the amount of pollutants or flood waters reaching the downstream TNW. The wetlands and non-wetland waters help to transfer nutrients and organic carbon that support downstream food webs and in combination with its adjacent wetlands, contribute to the physical, chemical, or biological integrity of the TNW. The lakes, creeks, streams, small lakes and wetlands provide the local residents recreational values such as but not limited to boating, fishing and hunting as well as aesthetic values important for property values and quality of life in the central Florida area. Discharge waters are critical in maintaining downstream Reedy Creek Waters exemplified at USGS Gauging Station 02266300.

**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: The Reedy Creek drainage basin or watershed spans 73.9 square miles and receives water input from large adjacent upland and wetland areas which allow the system to flow for most of the year in years with normal rain fall. The historical water levels for Reedy Creek range from 64.3 to 96.55 with the most recent data indicating a water elevation of 65.92 feet. (Orange County Water Atlas) The Hickory Nut Lake RPW is navigable in fact but lacks a substantial nexus to commerce. The RPW has a defined discharge at Reedy Creek.

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 (ft). RPW from Hickory Nut Lake extends 2.6 miles from the lake to Reedy Creek  
 Other non-wetland waters: Non-wetland waters 1 - 299 acres.  
 Identify type(s) of waters: lake and pond.

3. **Non-RPWs<sup>7</sup> 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 14 and 19 are geomorphic features of the Hickory Nut Lake system which have been specifically delineated by the applicant and proposed for impact. They provide the same ecological features as the perimeter wetland features of the lake.

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: acres.

<sup>7</sup>See Footnote # 3.

**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: Surface water/wetland 17 is 39.95 acres and surface water/wetland 20 is 0.39 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: acres.

**7. Impoundments of jurisdictional waters.<sup>8</sup>**

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):<sup>9</sup>**

- 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. acres
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands:

Wetland	Acres
15	0.2
18	0.2
42	0.2

<sup>8</sup> To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>9</sup> 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.

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):

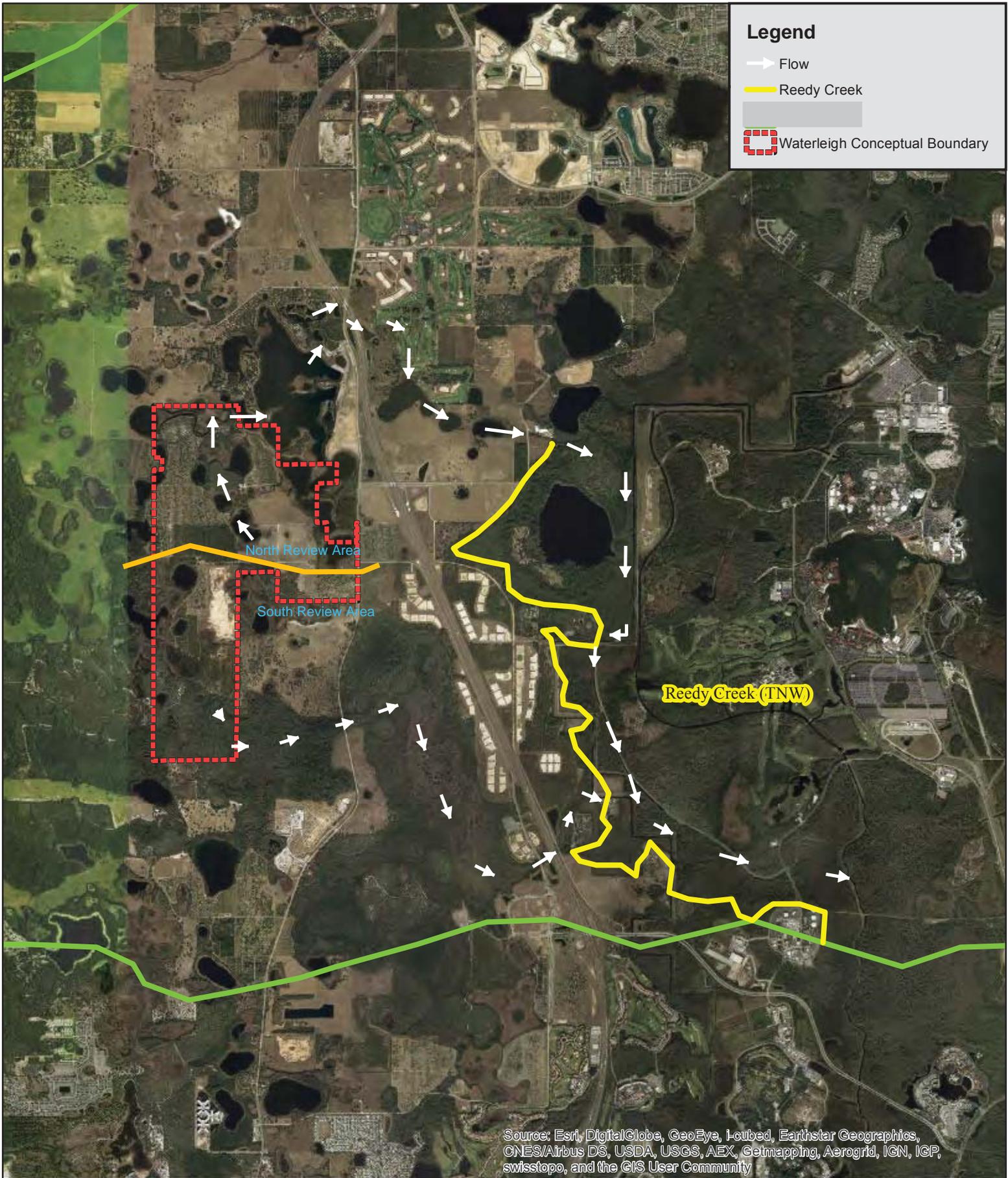
- Non-wetland waters (i.e., rivers, streams):          linear feet,          width (ft).
- Lakes/ponds:          acres.
- Other non-wetland waters: acres. List type of aquatic resource:.
- Wetlands:          acres.

**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. See Application
  - 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:          .
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s).
- USDA Natural Resources Conservation Service Soil Survey. Citation:
- National wetlands inventory map(s).
- State/Local wetland inventory map(s):.
- FEMA/FIRM maps:          .
- 100-year Floodplain Elevation is:
- Photographs:
- Previous determination(s). File no. and date of response letter:          .
- Applicable/supporting case law:          .
- Applicable/supporting scientific literature:          .
- Other information (please specify):  
Data from Orange County Water Atlas on Reedy Creek water levels and flows.

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** There are 228.7 acres of jurisdictional and 0.61 acres of hydrologically isolated wetland and non-wetland waters within the “North Review Area” of Waterleigh Phase 2. This document determines the jurisdictional status of waters of the United States, including wetlands and non-wetland waters, found within the “North Review Area” of Waterleigh Phase 2. Waters of the United States (wetlands and non-wetland waters) outside of the review area boundaries are not considered as part of this evaluation and maybe evaluated in subsequent determinations.



Waterleigh Conceptual/Phase II Site  
 Orange County, Florida  
 Figure 7  
 Flow Regime



5,000 Feet  
 Project #: 110-89  
 Produced By: MEC  
 Date: 11/10/2016

# Waterleigh - SAJ-2016-00216

Relevant Reach North

Lake Needham

Huckleberry Lake

Tub Lake

Sandel Rd

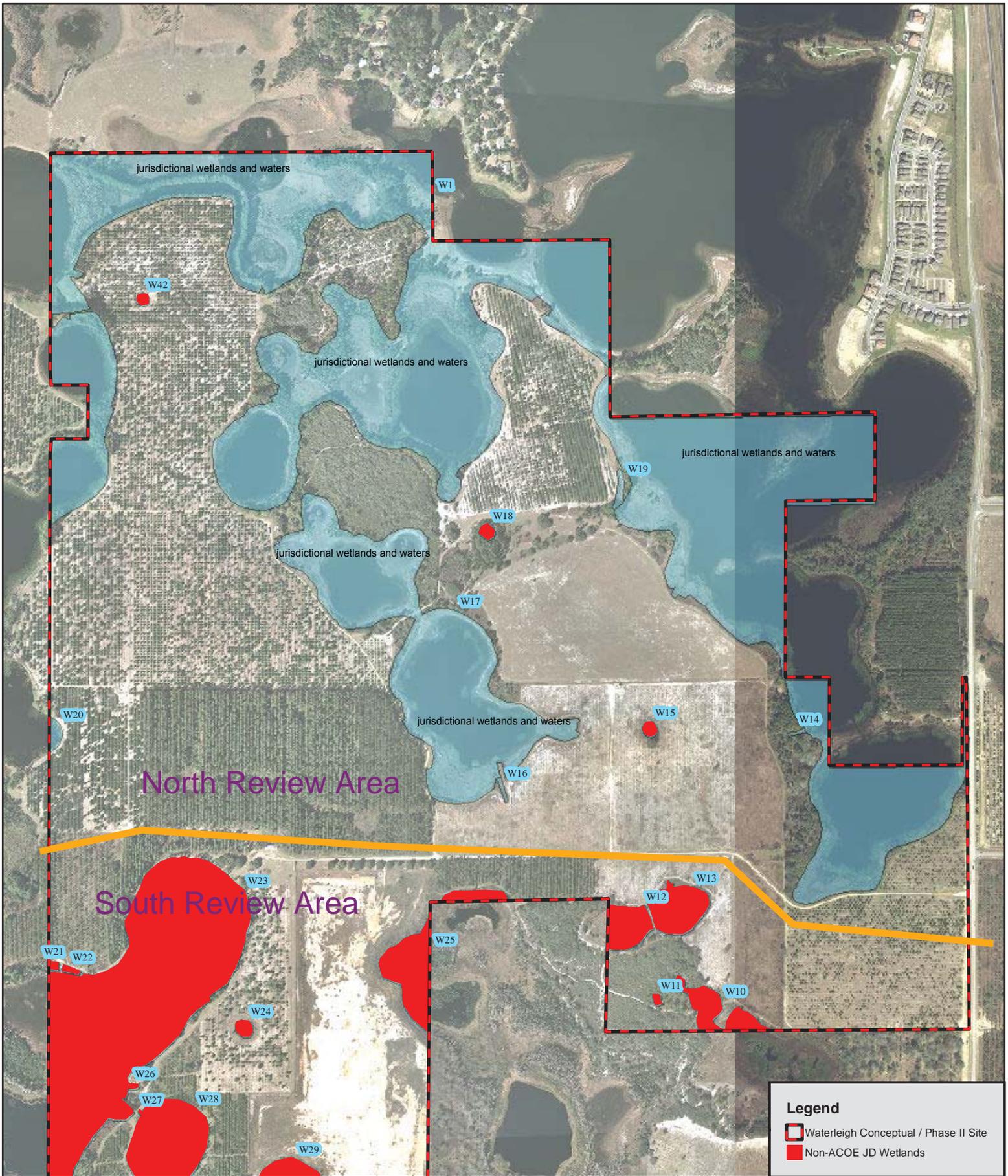
Hickorynut Lake



1 mi

## Legend

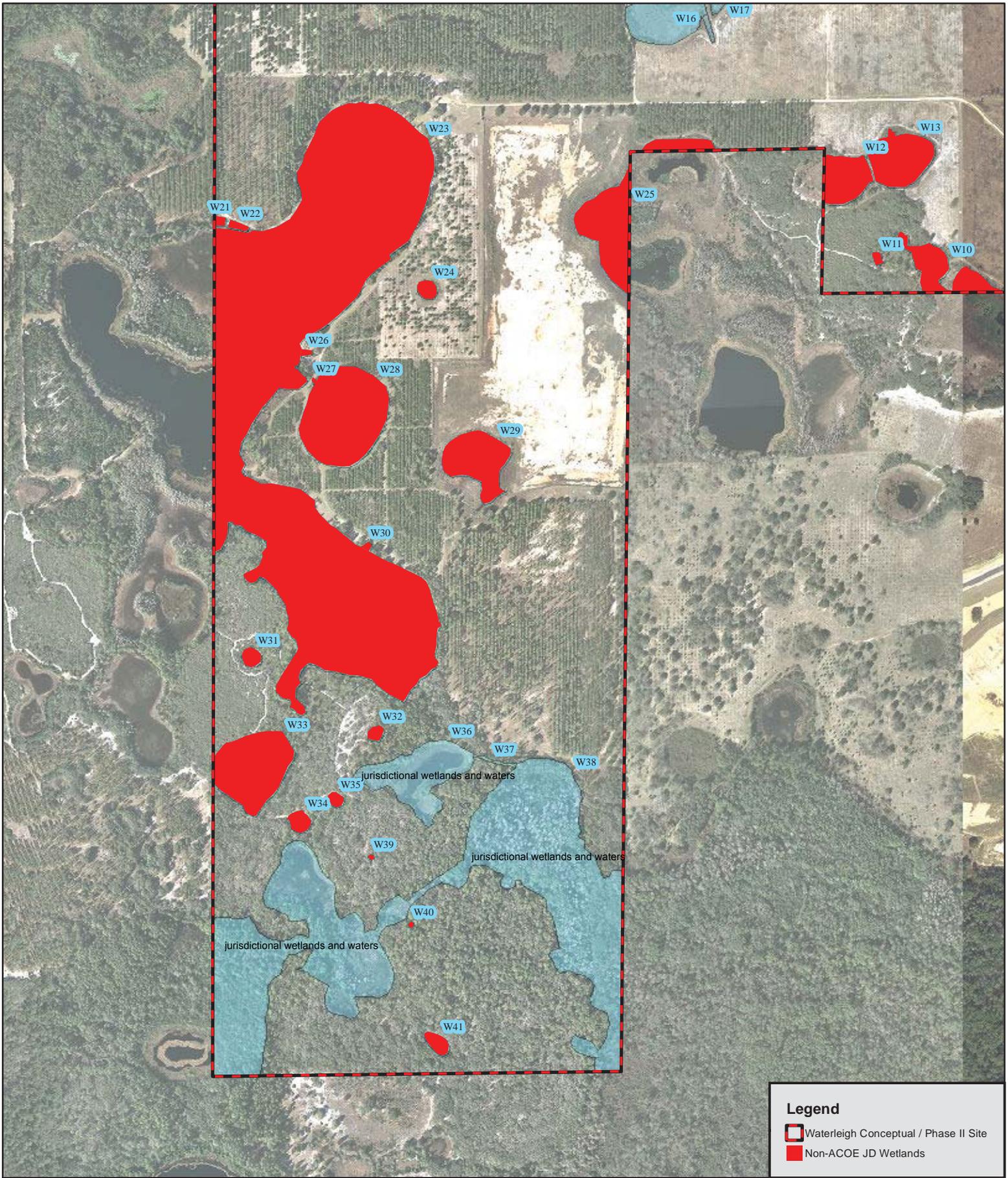
- LACUSTRINE: 
- NHD Flowline: 
- PALUSTRINE: 
- Review Area: 



Waterleigh Conceptual/Phase II Site  
 Orange County, Florida  
 Figure 8  
 2015 Aerial Photograph

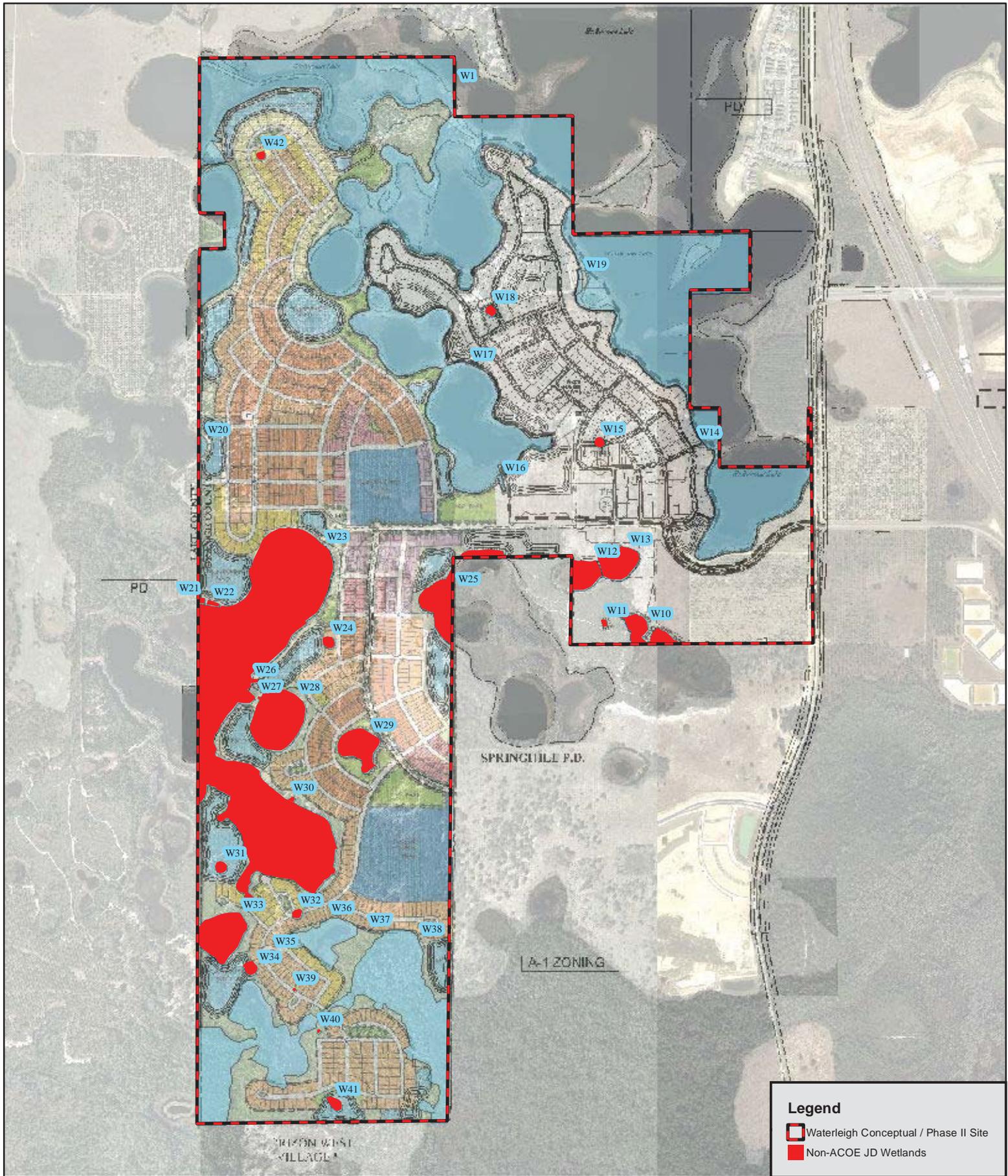


1,100  
 Feet  
 Project #: 110-89  
 Produced By: MEC  
 Date: 1/16/2017



Waterleigh Conceptual/Phase II Site  
 Orange County, Florida  
 Figure 9  
 2015 Aerial Photograph





**Legend**

- Waterleigh Conceptual / Phase II Site
- Non-ACOE JD Wetlands

Waterleigh Conceptual/Phase II Site  
 Orange County, Florida  
 Figure 10  
 Site Plan

1,600  
 Feet  
 Project #: 110-89  
 Produced By: MEC  
 Date: 1/18/2017

N

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

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): SAJ-2016-00216**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Cocoa Regulatory Field Office, Cocoa, Florida, Waterleigh P.D. Phase 2, SAJ-2016-00216(SP-AWP)**

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:** The project is a 1,128 acre planned development situated at the southwest corner of the intersection of Old YMCA Road and Avalon Road (State Road 545), in Sections 6,7,8, & 18, Township 24 South, Range 27 East, Orange County, Florida

State:FL County/parish/borough: Orange City: Unincorporated Orange County, Florida

Center coordinates of site (lat/long in degree decimal format): Lat. 28.4149° **N**, Long. 81.6481° **W**.

Universal Transverse Mercator:

Name of nearest waterbody: Hickorynut Lake

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lake Marion Creek

Name of watershed or Hydrologic Unit Code (HUC): HUC 10 0309010105

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: August 5, 2016

Field Determination. Date(s): April 6, 2016

**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** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the **review area**

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area (check all that apply):<sup>1</sup>**

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

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

Impoundments of jurisdictional waters

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:.013 acre

Non-wetland waters	Type	Acres
37	510	0.13

<sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup> 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).

Wetlands: 51.38 acres

Wetland	Type	Acres
36	641	5.16
38	630	46.22

- c. **Limits (boundaries) of jurisdiction** based on: 1987 Delineation Manual  
Elevation of established OHWM (if known):.

2. **Non-regulated waters/wetlands (check if applicable):**<sup>3</sup>

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands and non-wetland waters 10,11,12,13,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,39,40,41 and Lake Heney totaling 99.7 acres are isolated within the review area. The subject wetlands and non-wetland waters are surrounded by upland vegetation and do not have any physical, chemical, or biological connections to waters of the United States. Sandy soils surrounding the wetlands allow the downward movement of water to the surficial aquifer. Geomorphic conditions appear to reduce the opportunity for lateral movement by subsurface flow to any nearby intermittent tributaries (i.e. swales, ditches). Give the absence of a factual determination of subsurface flow, or a substantial nexus to commerce, these wetlands were determined to be isolated consistent with SWANCC and the "Migratory Bird Rule".

### **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 waterbody<sup>4</sup> 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.

<sup>3</sup> Supporting documentation is presented in Section III.F.

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

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

**(i) General Area Conditions:**

Watershed size: Reedy Creek Watershed (Source: Orange County Water Atlas)  
Drainage area: 73.9 Square Miles  
Average annual rainfall: inches 50  
Average annual snowfall: 0 inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

- Tributary flows directly into TNW.
- Tributary flows through 2 tributaries (unnamed waterway with its associated wetlands and lakes flow into Reedy Creek and then TNW.)

Project waters are 24 river miles from TNW.  
Project waters are 0 river miles from RPW.  
Project waters are 16 aerial (straight) miles from TNW.  
Project waters are 0 aerial (straight) miles from RPW.  
Project waters cross or serve as state boundaries. NO.

Identify flow route to TNW: Water flows east and south through unnamed waterway or creek east to Reedy Creek which eventually flows into Lake Marion Creek and Lake Hatchineha.

Tributary stream order, if known: one

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

- Tributary is:**
- Natural
  - Artificial (man-made). Explain: There are some areas of the tributary that flow from un-named wetlands systems to Reedy Creek that have been either manipulated into ditches or that have been created by ditching.
  - Manipulated (man-altered). See note above.

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

Average width: Varies from 100+ feet wide in the wetlands and creeks to 60 feet at the channelized area under SR 429 prior to connecting to Reedy Creek.  
Average depth: varies  
Average side slopes: varies

**Primary tributary substrate composition (check all that apply):**

- Silts
- Sands
- Concrete
- Cobbles
- Gravel
- Muck
- Bedrock
- Vegetation. Type/% cover: 0 to 100%
- Other. Explain: These area assumptions based on experience with the area..

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: unknown.  
Presence of run/riffle/pool complexes. There are runs, riffles and pools along the tributaries path to the TNW.  
Tributary geometry: straight to meandering  
Tributary gradient (approximate average slope): Fairly Flat

**(c) Flow:**

Tributary provides for: Seasonal Flow  
Estimate average number of flow events in review area/year: 8 to 10 or more  
Describe flow regime:

Other information on duration and volume: unknown

Surface flow varies.

Subsurface flow: Unknown. Explain findings: No finding.  
 Dye (or other) test performed: None Conducted.

**Tributary has (check all that apply):**

- Bed and banks
- OHWM<sup>5</sup> (check all indicators that apply):
  - clear, natural line impressed on the bank
  - the presence of litter and debris

<sup>5</sup>A 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.

- |   |   |
|---|---|
| <input type="checkbox"/> changes in the character of soil   | <input type="checkbox"/> destruction of terrestrial vegetation      |
| <input type="checkbox"/> shelving   | <input type="checkbox"/> the presence of wrack line                 |
| <input type="checkbox"/> vegetation matted down, bent, or absent  | <input type="checkbox"/> sediment sorting                           |
| <input checked="" type="checkbox"/> leaf litter disturbed or washed away  | <input type="checkbox"/> scour                                      |
| <input checked="" type="checkbox"/> sediment deposition   | <input type="checkbox"/> multiple observed or predicted flow events |
| <input checked="" type="checkbox"/> water staining  | <input type="checkbox"/> abrupt change in plant community           |
| <input checked="" type="checkbox"/> other (list): Based on past experience with similar waterbodies in the Central Florida area this water path |   |

will contain a variety of soils, vegetation and indicators of water flow along its path to the TNW.

Discontinuous OHWM.<sup>6</sup> Explain: .

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

- |  |  |
|--|--|
| <input type="checkbox"/> High Tide Line indicated by:                                    | <input type="checkbox"/> Mean High Water Mark indicated by:            |
| <input type="checkbox"/> oil or scum line along shore objects                            | <input type="checkbox"/> survey to available datum;                    |
| <input type="checkbox"/> fine shell or debris deposits (foreshore)                       | <input type="checkbox"/> physical markings;                            |
| <input type="checkbox"/> physical markings/characteristics                               | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges  |  |
| <input checked="" type="checkbox"/> other (list): Review of Aerial Maps on Google Earth. |  |

**(iii) Chemical Characteristics:**

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

Identify specific pollutants: Not Known

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

- Riparian corridor. Characteristics (type, average width): varies.
- Wetland fringe. Characteristics:.
- Habitat for:
  - Federally Listed species. Explain findings:sand skinks have been confirmed in the upland resources adjacent to wetlands, indigo snakes are expected to utilize the wetland and upland features of the site.
  - Fish/spawn areas. Explain findings Finfish are expected to occur in Lake Iherg.
  - Other environmentally-sensitive species. Explain findings:
  - Aquatic/wildlife diversity. Explain findings: small and medium mammals, avian species, amphibians, and reptiles.

**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: acres

Wetland type. Explain:.

Wetland quality. Explain:.

Project wetlands cross or serve as state boundaries. Explain: no.

**(b) General Flow Relationship with Non-TNW:**

Flow is: Explain:.

Surface flow is:

Characteristics:

Subsurface flow: **Pick List**. Explain findings:

Dye (or other) test performed: .

**(c) Wetland Adjacency Determination with Non-TNW:**

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: .

Ecological connection. Explain: .

Separated by berm/barrier. Explain: .

**(d) Proximity (Relationship) to TNW**

Project wetlands are river miles from TNW.

Project waters are aerial (straight) miles from TNW.

Flow is from:.

Estimate approximate location of wetland as within the floodplain.

<sup>6</sup>Ibid.

**(ii) Chemical Characteristics:**

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

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.
- Habitat for:
  - Federally Listed species. Explain findings.
  - Fish/spawn areas. Explain findings.
  - Other environmentally-sensitive species. Explain findings.
  - Aquatic/wildlife diversity. Explain findings.

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

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

Approximately ( ) 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>

Summarize overall biological, chemical and physical functions being performed: The review area includes a total of 824 acres of wetlands and non-wetland waters. This includes palustrine (465 acres) and Lacustrine (359 acres). These aquatic systems provide habitat for wildlife, perform flood storage and drainage for the surrounding areas, water quality treatment and baseflow to Reedy Creek, and food web support for the Kissimmee River watershed.

**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 food webs?
- 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.**
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:
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:
4. **Significant nexus findings for wetlands directly abutting an RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its abutting wetlands, then go to Section III.D:

5. **Significant nexus findings for an RPW (perennial or seasonal).** Explain findings of presence or absence of significant nexus below, based on the tributary, then go to Section III.D:

The subject wetlands, non-wetland waters, and tributaries are hydrologically connected to Reedy Creek, and ultimately to Lake Hatchineha. The systems provide a variety of habitat and lifecycle support functions. These functions include but are not limited to feeding, nesting, spawning, or areas to rear young for a variety of species such as fish, amphibians, snakes, reptiles, birds, and mammals. These species are present along the path of the waterway to and including the lakes that receive their waters. Extensive development has occurred in the region prior to stormwater permitting rules and these waterbodies and wetlands help to reduce the amount of pollutants or flood waters reaching the downstream TNW. The wetlands and non-wetland waters help to transfer nutrients and organic carbon that support downstream food webs and in combination with its adjacent wetlands, contribute to the physical, chemical, or biological integrity of the TNW. The lakes, creeks, streams, small lakes and wetlands provide the local residents recreational values such as but not limited to boating, fishing and hunting as well as aesthetic values important for property values and quality of life in the central Florida area. Discharge waters are critical in maintaining downstream Reedy Creek Waters exemplified at USGS Gauging Station 02266300.

**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: The Reedy Creek drainage basin or watershed spans 73.9 square miles and receives water input from large adjacent upland and wetland areas which allow the system to flow for most of the year in years with normal rain fall. The historical water levels for Reedy Creek range from 64.3 to 96.55 with the most recent data indicating a water elevation of 65.92 feet. (Orange County Water Atlas). The subject wetland and non-wetland waters are hydrologically connected to Reedy Creek through a stream connection which is confined at its intersection with SR 429. National Hydrography Dataset (NHD) Website identifies the flow way as a perennial system.
- 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: 5 acres.  
 Other non-wetland waters: acres.  
 Identify type(s) of waters: Lake and pond non-wetland waters.

3. **Non-RPWs<sup>7</sup> 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 36,37,38 are physically and hydrologically connected to the RPW which connects to Reedy Creek
- 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: acres.

<sup>7</sup>See Footnote # 3.

**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: wetland 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: acres.

**7. Impoundments of jurisdictional waters.<sup>8</sup>**

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):<sup>9</sup>**

- 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: 4 acres.
- Other non-wetland waters: acres. List type of aquatic resource:
- Wetlands:

Wetland	Acres
10	2.3
11	0.1
12	2.2
13	2.9
21	0.1
22	0.13

<sup>8</sup> To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>9</sup> 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.

23	69.6
24	0.312
25	4.95
26	0.07
27	0.02
28	7.31
29	3.15
30	0.06
31	0.3
32	0.2
33	4.91
34	0.4
35	0.19
39	0.02
40	0.023
41	0.39

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):

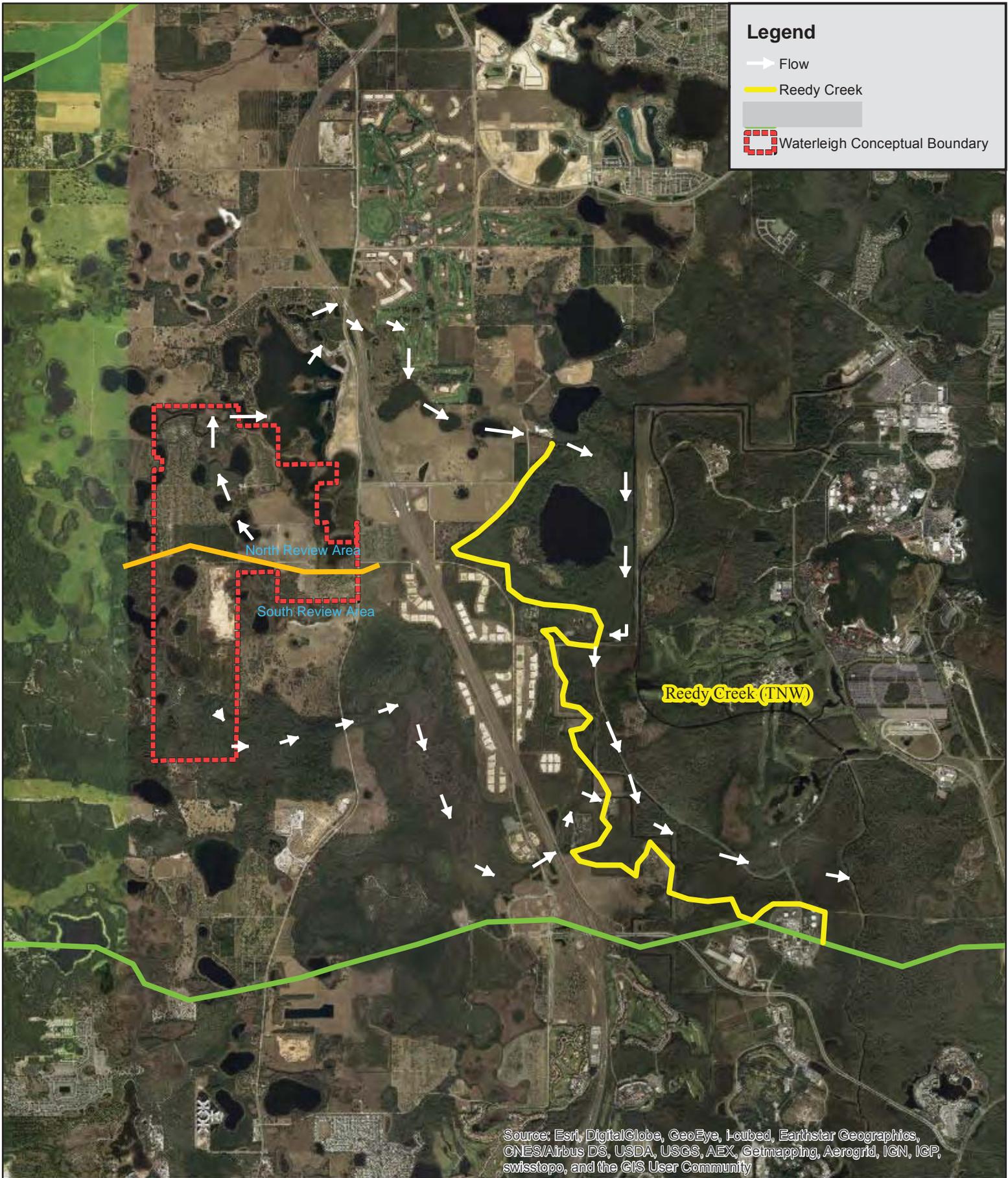
- Non-wetland waters (i.e., rivers, streams):          linear feet,          width (ft).
- Lakes/ponds:          acres.
- Other non-wetland waters: acres. List type of aquatic resource:.
- Wetlands:          acres.

**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. See Application
  - 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: .
  - USGS NHD data. NHD Flow Lines
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s).
- USDA Natural Resources Conservation Service Soil Survey. Citation:
- National wetlands inventory map(s).
- State/Local wetland inventory map(s):.
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is:
- Photographs:
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify):
  - Data from Orange County Water Atlas on Reedy Creek water levels and flows.

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** There are 51.51 acres of jurisdictional and 99.64 acres of hydrologically isolated wetland and non-wetland waters within the “South Review Area” of Waterleigh Phase 2. This document determines the jurisdictional status of waters of the United States, including wetlands and non-waters, found within the “South Review Area” of Waterleigh Phase 2. Waters of the United States (wetlands and non-wetland waters) outside of the review area boundaries are not considered as part of this evaluation and maybe evaluated in subsequent determinations.



Waterleigh Conceptual/Phase II Site  
 Orange County, Florida  
 Figure 7  
 Flow Regime



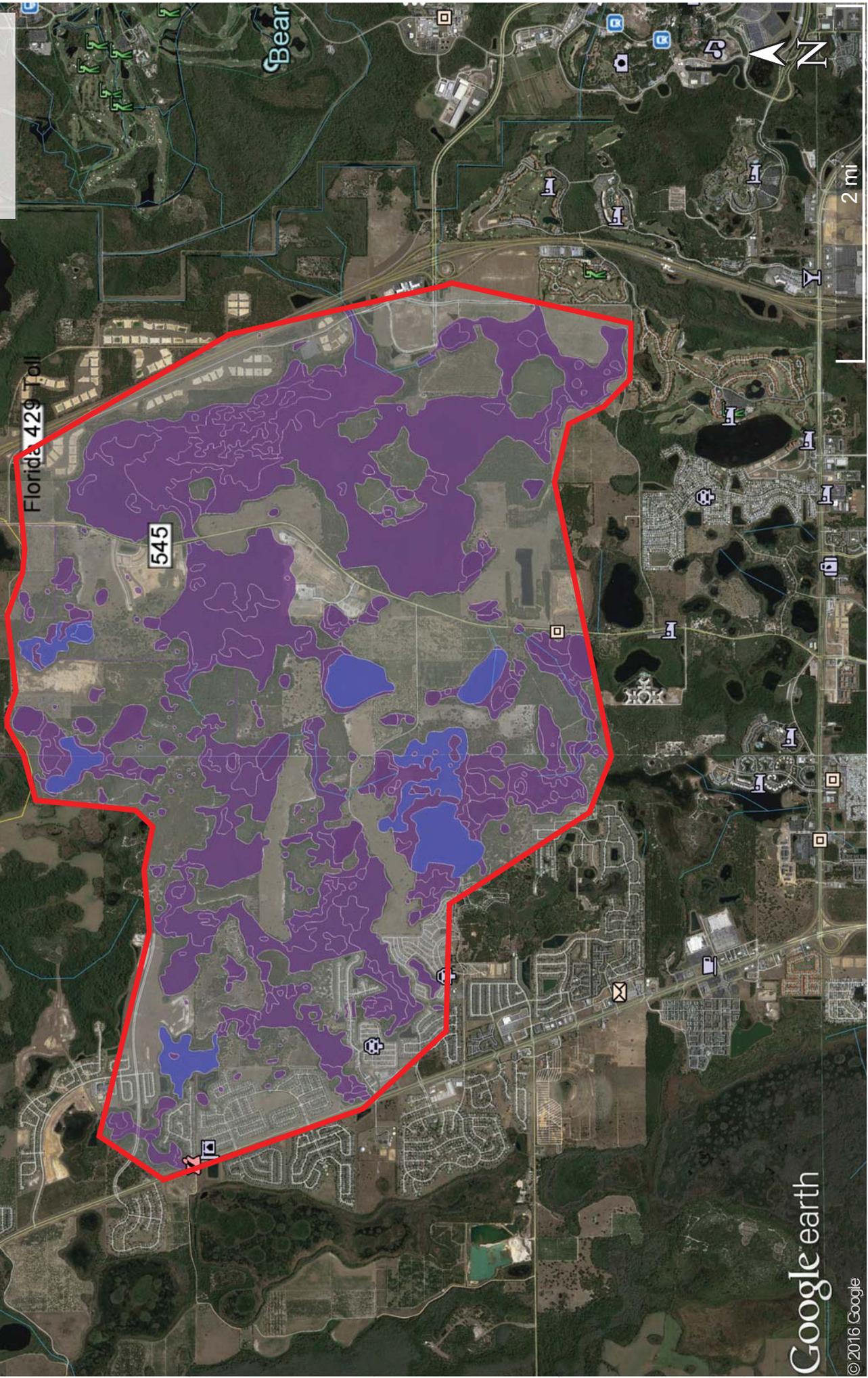
5,000  
 Feet  
 Project #: 110-89  
 Produced By: MEC  
 Date: 11/10/2016

# Waterleigh - SAJ-2016-00216

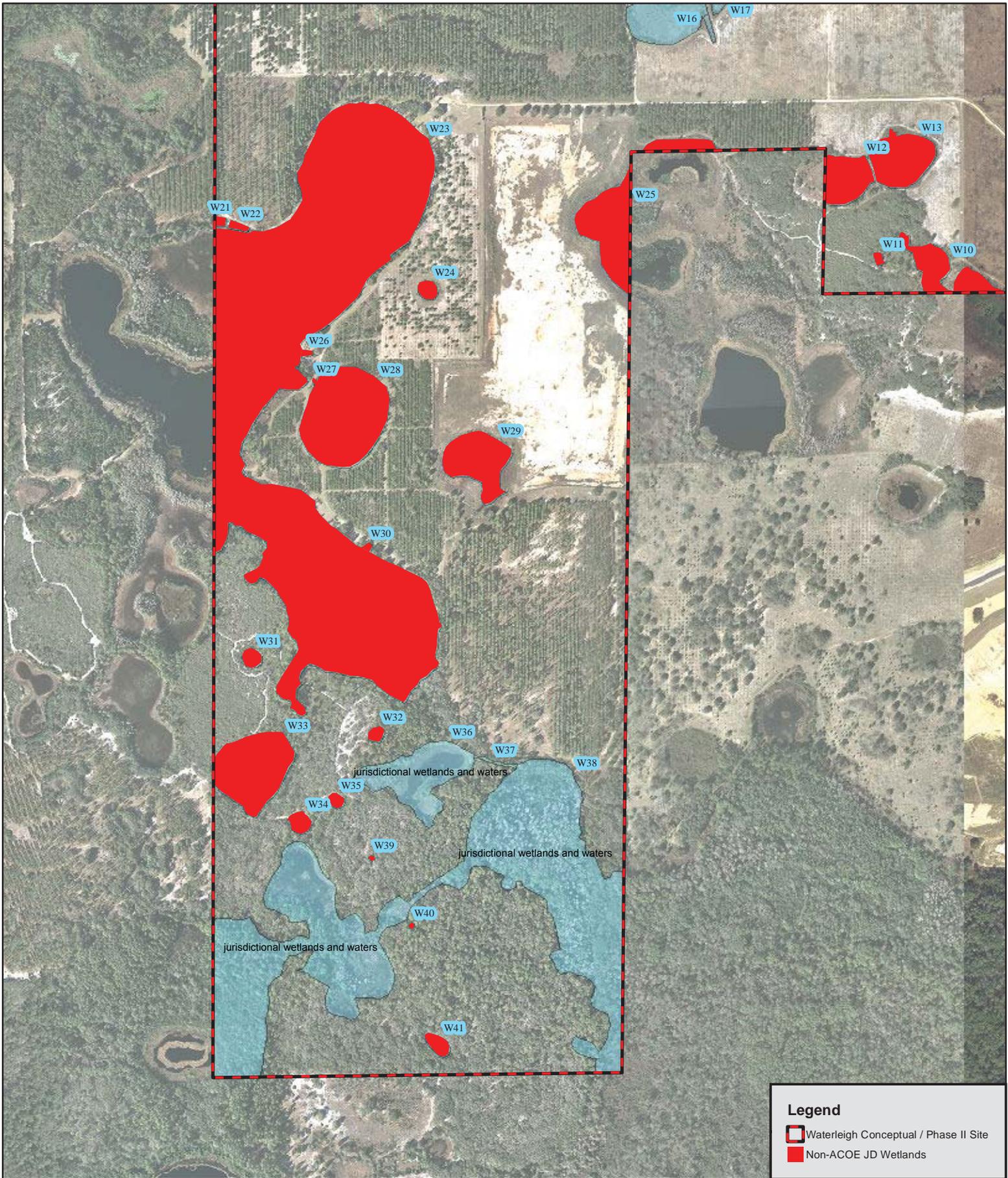
Relevant Reach South

## Legend

- LACUSTRINE: 
- NHD Flowline: 
- PALUSTRINE: 
- Review Area: 



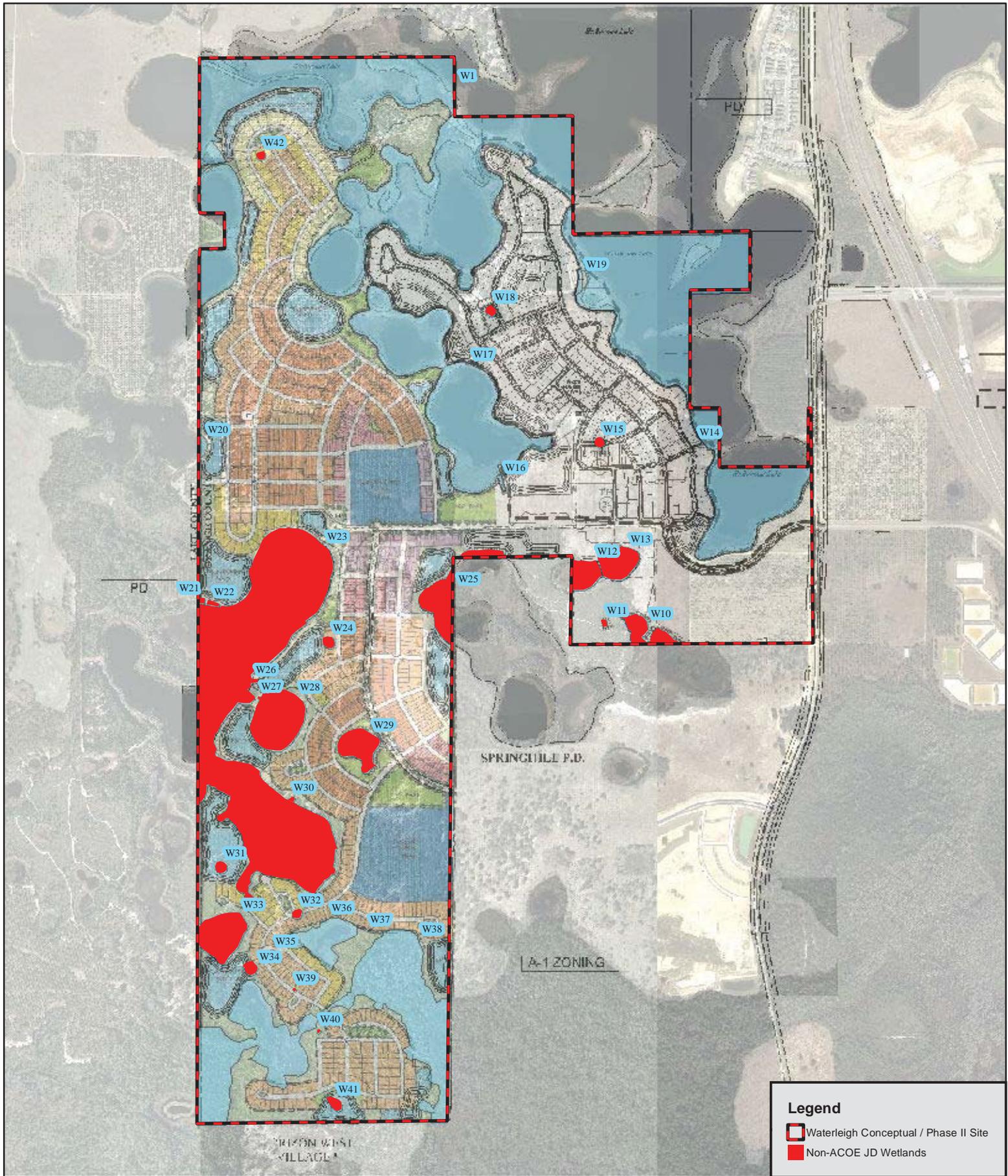




Waterleigh Conceptual/Phase II Site  
 Orange County, Florida  
 Figure 9  
 2015 Aerial Photograph



1,000 Feet  
 Project #: 110-89  
 Produced By: MEC  
 Date: 1/18/2017



Waterleigh Conceptual/Phase II Site  
 Orange County, Florida  
 Figure 10  
 Site Plan



1,600 Feet

Project #: 110-89  
 Produced By: MEC  
 Date: 1/18/2017