



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): 15 June 2018

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Jacksonville District, FPL - Crawford Diamond Tract, SAJ-2012-03100

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Florida County/parish/borough: Nassau City: Crawford
Center coordinates of site (lat/long in degree decimal format): Lat. 30.5231° N, Long. 81.8866° W.
Universal Transverse Mercator: 17R

Name of nearest waterbody: Mill Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: St. Marys River

Name of watershed or Hydrologic Unit Code (HUC): 03070204 (St. Marys River), 030702040601 (Mill Creek)

- 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:
Field Determination. Date(s): 7 December 2012, 26 March 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
Relatively permanent waters2 (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: 9 acres.
Wetlands: 2,728 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

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: Several systems delineated within the project site area are completely hydrologically isolated from the local tributary system and are not within Federal jurisdiction. These hydrologically isolated systems are typically depression systems surrounded by silviculture land. The total area of these systems, which includes wetlands (86.78 acres) and surface waters (0.69 acres) is approximately 87.47 acres. In addition, there are 1.62 acres of non-RPW surface water conveyances (upland cut ditches) encompassed by the project site.

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.

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: N/A.

Summarize rationale supporting determination:

2. **Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is "adjacent": N/A.

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: **Pick List**

Drainage area: 20,658 **acres**

Average annual rainfall: 52 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. Water flows from an offsite unnamed tributary of Mill Creek to Mill Creek, which flows in to the St. Marys River (TNW).

Project waters are 15-20 river miles from TNW.

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

Project waters are 5-10 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: N/A

Identify flow route to TNW⁵: Forested wetlands on the project site (northwest border) are hydrologically connected to a tributary of Mill Creek (RPW), which flows in to Mill Creek (RPW), which flows to the St. Marys River (TNW).

Tributary stream order, if known: N/A.

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

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.

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

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

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

Average width: variable
Average depth: variable
Average side slopes: variable

Primary tributary substrate composition (check all that apply):

Silts Sands Concrete
 Cobbles Gravel Muck
 Bedrock Vegetation. Mixed forested wetland (cypress/bay/pine)/5-80% cover
 Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Highly Stable, the majority of the length of the Mill Creek tributary and Mill Creek proper are natural drainage paths that pass through inundated forested swamp systems.

Presence of run/riffle/pool complexes. Explain: N/A.

Tributary geometry: variable

Tributary gradient (approximate average slope): unknown

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **20 (or greater)**

Describe flow regime: unknown.

Other information on duration and volume:

Surface flow is: **Discrete and 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):

(iii) **Chemical Characteristics:**

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

Explain: Swamp systems tend to be tannic, stream systems have higher flow and are more oxygenated.

Identify specific pollutants, if known: unknown.

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.

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

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics: Variable.
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings: Swamp systems support diverse vegetation (ground to canopy), which Supports a variety of aquatic, avian, reptilian, amphibian, and mammalian species.

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: 142.45 acres

Wetland type. Explain: Mixed forested wetlands.

Wetland quality. Explain: The wetland adjacent to the RPW within the review area (Mill Creek watershed) has been altered by decades of intense silviculture (bedding/drainage) resulting in poor to moderate functional quality of this system. Silviculture activities and drainage have resulted in diminished functional quality of the wetlands adjacent to the RPW within the project site.

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

(b) General Flow Relationship with Non-TNW:

Flow is: **Perennial flow**. Explain: The onsite wetlands adjacent to the unnamed tributary of Mill Creek has water levels and flows that suggest a discrete hydrologic connection during the wet season and as stormflow during the dry season.

Surface flow is: **Discrete**

Characteristics: Water levels and flows within the RPW during wetland dry seasons suggest a discrete hydrologic connection exists.

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: Most of the wetlands neighboring the RPW within the review area is hydrologically connected (sheetflow, ditches, and other conveyances) to the RPW. Within the project site, the acreage of these wetlands is ~1,269 acres offsite within the review area and ~142.45 acres onsite.
 - Ecological connection. Explain: Onsite systems provide foraging and nesting habitat for small mammals, reptiles, amphibians, and birds that forage and/or inhabit adjacent offsite systems.
 - Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **5-10** river miles from TNW.

Project waters are **5-10** aerial (straight) miles from TNW.

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

Estimate approximate location of wetland as within the **100 - 500-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: Onsite wetlands generally have a high tannin (tannic) component and water color is brownish.

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: The vegetative community within forested wetlands on the project site is typically comprised of the following species: the canopy stratum is comprised of red maple (*Acer rubrum*), swamp tupelo (*Nyssa sylvatica* var. *biflora*), water oak (*Quercus nigra*), bald-cypress (*Taxodium distichum*), pond-cypress (*Taxodium ascendens*), sweetbay (*Magnolia virginiana*), sweetgum (*Liquidambar styraciflua*), laurel oak (*Quercus laurifolia*), slash pine (*Pinus elliotii*), and dahoon (*Ilex cassine*), with occurrences of loblolly bay (*Gordonia lasianthus*), swamp bay (*Persea palustris*), and planted slash pine along the edges of some of the systems. The subcanopy stratum is comprised of juvenile tree

species of red maple, sweetbay, bald-cypress, pond-cypress, swamp tupelo, swamp bay, slash pine, dahoon, water oak, loblolly bay, and wax myrtle (*Morella cerifera*). The shrub stratum is comprised of younger tree species of slash pine, swamp tupelo, bald-cypress, pond-cypress, red maple, swamp bay, laurel oak, and sweet gum with fetterbush (*Lyonia lucida*), highbush blueberry (*Vaccinium corymbosum*), wax myrtle, saw palmetto (*Serenoa repens*), titi (*Cyrilla racemiflora*), and cabbage palm (*Sabal palmetto*). The groundcover is comprised of a variety of species including Virginia chain fern (*Woodwardia virginica*), flatsedge (*Cyperus* sp.), greenbrier, (*Smilax* spp.), bushy bluestem (*Andropogon glomeratus*), camphorweed (*Pluchea* sp.), dogfennel (*Eupatorium capillifolium*), yelloweyed grass (*Xyris* sp.), warty panicgrass (*Panicum verrucosum*), cinnamon fern (*Osmundastrum cinnamomeum*), blackberry (*Rubus* spp), maoidencane (*Panicum hemitomon*), fetterbush, grapevine (*Vitis* spp), beaksedge (*Rhynchospora* sp.), chalky bluestem (*Andropogon virginicus* var. *glaucus*), Carolina redroot (*Lachnanthes carolina*), and spikerush (*Eleocharis* sp.), among others.

- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings: Forested wetland systems within the Project Site typically provide habitat for use by a variety of native amphibian, reptile, bird, and mammal species, which may include: squirrel treefrog, little grass frog, chicken turtle, green anole, northern cardinal, common yellowthroat, tufted titmouse, eastern kingbird, gray catbird, eastern towhee, eastern phoebe, Carolina wren, turkey vulture, black vulture, wild turkey, redheaded woodpecker, pileated woodpecker, red-shouldered hawk, osprey, nine-banded armadilla, white-tailed deer, and raccoon.

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

All wetland(s) being considered in the cumulative analysis: **2**

Approximately (2,180) 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>
N	~782, ~1,269	N	~142.45

Summarize overall biological, chemical and physical functions being performed: The wetlands provide water storage, nutrient storage and transformation, and sediment filtration for waters flowing to the RPWs and TNW. Additionally, these wetlands provide potentially suitable cover, and forage habitat for a wide variety of indigenous mammals, birds, reptiles, and amphibians. These wetlands contribute to the overall ecological health of that system, which supports essential fish habitat and various commercial and recreational boating activities such as, but not limited to, fishing, shrimping, and eco-based tourism.

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: There are 1.62 acres of upland-cut roadside ditches (non-RPW, non-wetland surface water conveyances) within this "half" of the project site. However, these ditches do not contain any vegetation or physical indicators suggesting any routine inundation. These ditches strictly hold and/or convey roadway runoff to maintain roadway functions (ability to support vehicles). These ditches, therefore, do not provide biological, chemical, or physical benefits to downstream systems. Therefore, these ditches have been deemed to be hydrologically isolated and are discussed in Section F.
- 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: N/A.
- 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: The wetland system at the northwest corner of the site extends offsite (more than doubling its size) and is adjacent to (but does not abut) an unnamed RPW tributary to Mill Creek and other wetlands abutting this RPW. This onsite/offsite system, the wetlands abutting the unnamed RPW, and the RPW significantly affect the physical, biological, and chemical nature of Mill Creek; and, hence, the St. Marys River. The systems provide considerable stormwater attenuation and regulation of flow volume and rate (physical); seed source (physical) detritus concentration (physical); nesting habitat for fauna that forage downstream waters (biological); foraging habitat for fauna nesting in downstream waters (biological); filtration of stormwater and groundwater (chemical); and other ecological contributions. The systems provide significant chemical, physical, and biological components of the downstream St Marys River system; and, greatly contribute to the overall ecological health of that system, which supports essential fish habitat and various commercial and recreational boating activities such as, but not limited to, fishing shrimping, and eco-based tourism.

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 tributaries of Mill Creek have seasonal or greater flow (perennial streams). These systems are noted on USGS maps; are routinely depicted on other cartography; and are well-established flowing systems with no debate on their flow regime.
 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: **8.5 miles** of RPWs (tributaries). Project site: 0 miles/acres of RPWs
 Other non-wetland waters: acres.
Identify type(s) of waters:

- 3. Non-RPW⁸ 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

⁸See Footnote # 3.



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SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 15 June 2018

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Jacksonville District, FPL - Crawford Diamond Tract, SAJ-2012-01300

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Florida County/parish/borough: Nassau City: Crawford
Center coordinates of site (lat/long in degree decimal format): Lat. 30.5231° N, Long. 81.8866° W.
Universal Transverse Mercator: 17 R

Name of nearest waterbody: Funks Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Nassau River

Name of watershed or Hydrologic Unit Code (HUC): 03070205 (Nassau River), 030702050102 (Alligator Creek)

- 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:
Field Determination. Date(s): 7 December 2012, 26 March 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
Relatively permanent waters2 (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:

Review Area:
Non-wetland waters: ~91 acres.
Wetlands: ~5,057 acres.
Project Site:
Non-wetland waters: ~324.64 acres
Wetlands: ~0.59 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

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: Several systems delineated within the project site area are completely hydrologically isolated from the local tributary

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.

system and are not within Federal jurisdiction. These hydrologically isolated systems are typically depression systems surrounded by silviculture land. The total area of these systems is ~86.08 acres. In addition, there are ~7.49 acres of non RPW surface water conveyances (upland-cut ditches) encompassed by the project site.

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: N/A

Summarize rationale supporting determination:

2. **Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is "adjacent": N/A.

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: **Pick List**

Drainage area: 29,406 acres (HUC: 03070205102 – Alligator Creek)

Average annual rainfall: 52 inches

Average annual snowfall: 0 inches

(ii) **Physical Characteristics:**

(a) **Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through 3 tributaries before entering TNW.

Project waters are 15-20 river miles from TNW.

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

Project waters are 10-15 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: N/A.

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: Forested wetlands on the project site are hydrologically connected to a tributary of Funks Creek (RPW), which flows in to Funks Creek (RPW), which flows into Cushing Creek (RPW), which flows into Alligator Creek (RPW), which flows in to the Nassau River (TNW).

Tributary stream order, if known:

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

Tributary is: Natural
 Artificial (man-made). Explain: Drainage network.
 Manipulated (man-altered). Explain: Unnamed tributary to Funks Creek is channelized.

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

Average width: variable
Average depth: variable
Average side slopes: variable.

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: Highly stable. The unnamed tributary of Funks Creek, Funks Creek, Cushing Creek, and Alligator Creek are all natural drainage paths that pass through inundated forested swamp systems.

Presence of run/riffle/pool complexes. Explain: N/A.

Tributary geometry: variable

Tributary gradient (approximate average slope): unknown

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **20 (or greater)**

Describe flow regime: unknown.

Other information on duration and volume:

Surface flow is: **Discrete and 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

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.

⁶ 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.

⁷Ibid.

other (list):

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: Swamp systems tend to be tannic. Stream systems have higher flow and are more oxygenated.
Identify specific pollutants, if known: unknown.

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

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics: variable.
- Habitat for:
- Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings: Swamp systems support diverse vegetation (ground to canopy), which supports a variety of aquatic, avian, reptilian, amphibian, and mammalian species.

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:

Review Area: ~4,776 acres (HUC: 030702050102 Alligator Creek)

Abutting RPW: ~4,076 acres

Adjacent to RPW: ~700 acres

Project Site: ~325.22 acres (HUC: 030702050102 Alligator Creek)

Abutting RPW: ~122.09 acres

Adjacent to RPW: ~203.13 acres (202.54 acres of wetlands, 0.59 acre of surface waters)

Wetland type. Explain: Mixed forested wetlands.

Wetland quality. Explain: Some wetlands adjacent to RPWs, within the review area (alligator Creek watershed) and the project site, have been altered by decades of intensive silviculture and are of poor to moderate quality. Silviculture-related bedding and drainage have resulted in diminished functional quality of wetlands adjacent to RPWs within the project site.

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

(b) General Flow Relationship with Non-TNW:

Flow is: **Perennial flow**. Explain: Wetlands on the project site that are adjacent to an unnamed perennial tributary of Funks Creek have water levels and flows that suggest a discrete hydrologic connection during the wet season and as storm flow during the dry season.

Surface flow is: **Discrete**

Characteristics: Water levels and flows within RPWs during wet and dry seasons suggest a discrete hydrologic connection exists.

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: Most of the wetlands neighboring RPWs within the review area are hydrologically connected (sheetflow, ditches, and other conveyances) to the RPWs. Within the project site, the acreage of these wetlands is ~203.13 acres (202.54 acres of wetlands; 0.59 acre of surface waters); within the review area the total acreage is approximately 700 acres.

Ecological connection. Explain: Onsite systems provide foraging and nesting habitat for small mammals, reptiles, amphibians, and birds that forage and/or inhabit adjacent offsite systems..

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **15-20** river miles from TNW.

Project waters are **10-15** aerial (straight) miles from TNW.

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

Estimate approximate location of wetland as within the **100 - 500-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: Onsite wetlands generally have a high tannin (tannic) component and water color is brownish.

Identify specific pollutants, if known: Unknown.

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

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain: The vegetative community within forested wetlands on the project site is typically comprised of the following species: the canopy stratum is comprised of red maple (*Acer rubrum*), swamp tupelo (*Nyssa sylvatica* var. *biflora*), water oak (*Quercus nigra*), bald-cypress (*Taxodium distichum*), pond-cypress (*Taxodium ascendens*), sweetbay (*Magnolia virginiana*), sweetgum (*Liquidambar styraciflua*), laurel oak (*Quercus laurifolia*), slash pine (*Pinus elliottii*), and dahoon (*Ilex cassine*), with occurrences of loblolly bay (*Gordonia lasianthus*), swamp bay (*Persea palustris*), and planted slash pine along the edges of some of the systems. The subcanopy stratum is comprised of juvenile tree species of red maple, sweetbay, bald-cypress, pond-cypress, swamp tupelo, swamp bay, slash pine, dahoon, water oak, loblolly bay, and wax myrtle (*Morella cerifera*). The shrub stratum is comprised of younger tree species of slash pine, swamp tupelo, bald-cypress, pond-cypress, red maple, swamp bay, laurel oak, and sweet gum with fetterbush (*Lyonia lucida*), highbush blueberry (*Vaccinium corymbosum*), wax myrtle, saw palmetto (*Serenoa repens*), titi (*Cyrilla racemiflora*), and cabbage palm (*Sabal palmetto*). The groundcover is comprised of a variety of species including Virginia chain fern (*Woodwardia virginica*), flatsedge (*Cyperus* sp.), greenbrier (*Smilax* spp.), bushy bluestem (*Andropogon glomeratus*), camphorweed (*Pluchea* sp.), dogfennel (*Eupatorium capillifolium*), yelloweyed grass (*Xyris* sp.), warty panicgrass (*Panicum verrucosum*), cinnamon fern (*Osmundastrum cinnamomeum*), blackberry (*Rubus* spp), maoidencane (*Panicum hemitomon*), fetterbush, grapevine (*Vitis* spp), beaksedge (*Rhynchospora* sp.), chalky bluestem (*Andropogon virginicus* var. *glaucus*), Carolina redroot (*Lachnanthes carolina*), and spikerush (*Eleocharis* sp.), among others.
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings: Forested wetland systems within the project site typically provide habitat for use by a variety of native amphibian, reptile, bird, and mammal species, which may include: squirrel tree frog, little grass frog, chicken turtle, green anole, northern cardinal, common yellowthroat, tufted titmouse, eastern kingbird, gray catbird, eastern towhee, eastern phoebe, Carolina wren, turkey vulture, black vulture, wild turkey, redheaded woodpecker, pileated woodpecker, red-shouldered hawk, osprey, nine-banded armadillo, white-tailed deer, and raccoon.

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

All wetland(s) being considered in the cumulative analysis: **13** (4 abutting wetlands, 8 adjacent wetlands, 1 adjacent surface water)

Approximately (5,101) 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>
Y (Project Site)	122.09		
N (Project Site)	~700		
N (Review Area)	~4,076		

Summarize overall biological, chemical and physical functions being performed: The wetlands provide water storage, nutrient storage and transformation, and sediment filtration for waters flowing to the RPWs and TNW. Additionally, these wetlands provide potentially suitable cover, and forage habitat for a wide variety of indigenous mammals, birds, reptiles, and amphibians. These wetlands contribute to the overall ecological health of that system, which supports essential fish habitat and various commercial and recreational boating activities such as, but not limited to, fishing, shrimping, and eco-based tourism.

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: There are 7.49 acres of upland-cut roadside ditches (non-RPW, non-wetland surface water conveyances) within this “half” of the project site. However, these ditches do not contain any vegetation or physical indicators suggesting any routine inundation. These ditches strictly hold and/or convey roadway runoff to maintain roadway functions (ability to support vehicles). These ditches, therefore, do not provide biological, chemical, or physical benefits to downstream systems. Therefore, these ditches do not have any significant nexus to downstream waters. The few wetlands near these ditches have been deemed to be hydrologically isolated and are discussed in Section F.
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: N/A.
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly affect 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: The numerous wetlands adjacent to the RPW significantly affect the physical, biological, and chemical nature of Funks Creek; and, hence, the Nassau River. The systems provide considerable stormwater attenuation and regulation of flow volume and rate (physical); seed source (physical) detritus concentration (physical); nesting habitat for fauna that forage downstream waters (biological); foraging habitat for fauna nesting in downstream waters (biological); filtration of stormwater and groundwater (chemical); and other ecological contributions. The systems provide significant chemical, physical, and biological components of the downstream Nassau River system; and, greatly contribute to the overall ecological health of that system, which supports essential fish habitat and various commercial and recreational boating activities such as, but not limited to, fishing shrimping, and eco-based tourism.

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: Review area: ~19 miles of RPWs (tributaries); Project site: 0 miles/acres of RPWs
- 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.

⁸See Footnote # 3.

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:
Review area: Approximately 4,076 acres of wetlands within the review area are contiguous to one or more of the tributary systems that flow through the review area (i.e., Alligator Creek or one of its tributaries).
Project Site: Approximately 122.09 acres of wetlands within the project site are contiguous to one or more of the tributary systems that flow through the review area (i.e., the unnamed tributary of Funks 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.

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.
Review area: There are approximately 700 acres of wetlands within the review area that are adjacent to Alligator Creek or one of its tributary systems (i.e., adjacent to but not abutting an RPW).
Project Site: There are approximately 203.13 acres of wetland and surface waters within the project site that are adjacent to a tributary of Funks Creek.

Provide acreage estimates for jurisdictional wetlands in the review area: 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.⁹**

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.

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

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.

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: 2.10 acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: 83.98 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: 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.
 - 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). Cite scale & quad name: .
- USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey Nassau County.
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): .
or Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: SAJ-2012-03100, 22 March 2013.
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD:



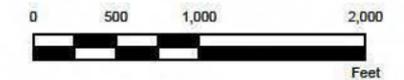
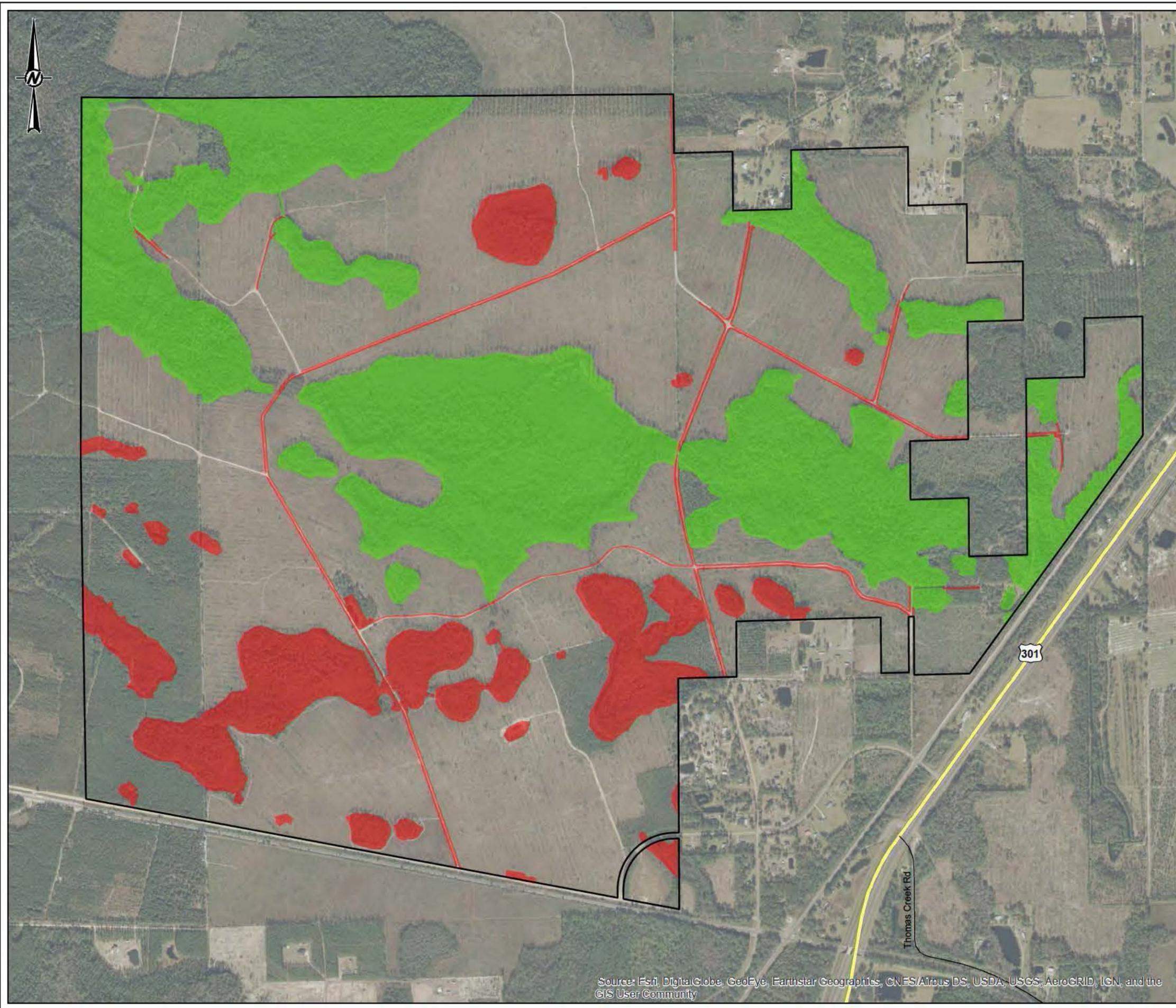
LEGEND

Project Boundary

Wetland Classification

SJRWMD/USACE Jurisdictional

SJRWMD Only Jurisdictional



REFERENCE(S)
1. PROPERTY BOUNDARY: FPL 2017
2. WETLAND CLASSIFICATION: BDA 2011
3. COORDINATE SYSTEM: NAD 1983 STATEPLANE FLORIDA NORTH F PS 0903 FEET
PROJECTION: LAMBERT CONFORMAL CONIC

CLIENT
FPL

PROJECT
PROJECT EAGLE

TITLE
WETLAND CLASSIFICATION

CONSULTANT:	YYYY-MM-DD	2017-07-06
	DESIGNED	JGW
	PREPARED	JGW
	REVISED	MH
	APPROVED	MH

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

PATH: G:\PROJECTS\Final\Drawings\Drawings\1783833_001\PROJECTS\1783833_001\PROJECTS\1783833_001\WetlandMap_11x17.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI B