US Army Corps of Engineers

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): November 8, 2019

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CESAJ-RD-WT, SAJ-2019-01357 Oak Haven Townhomes, Hillsborough County

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State:FL County/parish/borough: Hillsborough City: Tampa
Center coordinates of site (lat/long in degree decimal format): Lat. 27.825584° **N**, Long. -82.328298° **W**.
Universal Transverse Mercator:
Name of nearest waterbody: Bullfrog Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Hillsborough Bay
Name of watershed or Hydrologic Unit Code (HUC): Bullfrog Creek (HUC 031002060401)

- ☒ 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: October 15, 2019
- ☐ Field Determination. Date(s):

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. [*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 waters[2] (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 feet: width (ft) and/or acres.
   Wetlands: 6.41 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: **Aquatic resources: OSW B, C, D, E, F, G (for a total of 0.68 ac) are remnants of artificial ponds created by excavating and diking dry land to collect and retain water for stock watering (Preamble to 33 CFR Part 328 in the Nov 13, 1986 FR). See enclosed Memorandum for Record (MFR) for additional information**.

---

[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: .

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[4] 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: **acres**
Drainage area: **Pick List**
Average annual rainfall: 52.10 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: No.

Identify flow route to TNW[5]: .
Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: .
☐ Manipulated (man-altered). Explain: .

[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.

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):
☐ Silts ☐ Sands ☐ Concrete
☐ Cobbles ☐ Gravel ☐ Muck
☐ Bedrock ☐ Vegetation. Type/% cover:
☐ Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Pick List**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime: .
Other information on duration and volume: .

Surface flow is: **Pick List.** Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (check all indicators that apply):
☐ clear, natural line impressed on the bank
☐ changes in the character of soil
☐ shelving
☐ vegetation matted down, bent, or absent
☐ leaf litter disturbed or washed away
☐ sediment deposition
☐ water staining
☐ other (list):
☐ the presence of litter and debris
☐ destruction of terrestrial vegetation
☐ the presence of wrack line
☐ sediment sorting
☐ scour
☐ multiple observed or predicted flow events
☐ abrupt change in plant community
☐ 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:
☐ oil or scum line along shore objects
☐ fine shell or debris deposits (foreshore)
☐ physical markings/characteristics
☐ tidal gauges
☐ other (list):
☐ 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: .
Identify specific pollutants, if known: .

[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.
[7]Ibid.

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

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

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: 6.41 acres
Wetland type. Explain: Palustrine, forested.
Wetland quality. Explain: low to moderate.
Project wetlands cross or serve as state boundaries. Explain: N/A.

(b) General Flow Relationship with Non-TNW:
Flow is: **Intermittent flow**. Explain: Water flow typically follows rainfall patterns (http://www.tampabay.wateratlas). It rains on average 74 days a year in Tampa, FL with a pronounced wet (July-Sept) and dry (Oct-June) season (http://www.usa.com/tampa-fl-weather.htm).

Surface flow is**: Discrete and confined**
Characteristics: .

Subsurface flow: **Yes**. Explain findings: Surficial aquifer discharges laterally into Tampa Bay and its contributing rivers and creeks (Audubon Florida and Lewis Enfironemental Services 2015) .
☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:
☒ Directly abutting
☐ Not directly abutting
☐ Discrete wetland hydrologic connection. Explain: Surface water flows between wetlands and RPW at least seasonally during the wet season.
☐ Ecological connection. Explain: .
☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW
Project wetlands are **5-10** river miles from TNW.
Project waters are **2-5** aerial (straight) miles from TNW.
Flow is from: **Wetland to navigable waters.**
Estimate approximate location of wetland as within the **Pick List** 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: .
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:Palustrine, forested.
☒ Habitat for:
☐ Federally Listed species. Explain findings: .
☐ Fish/spawn areas. Explain findings: .
☐ Other environmentally-sensitive species. Explain findings: .
☒ Aquatic/wildlife diversity. Explain findings: Provides breeding, nesting, and foraging habitat for insects, reptiles, birds, amphibians, mollusks, and mammals (Haag and Lee 2010).

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

All wetland(s) being considered in the cumulative analysis: **1**
Approximately (6.41) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Wetland A (Y)	6.41 ac		

Summarize overall biological, chemical and physical functions being performed: Contributes freshwater inflow into TNW and filters and removes sediments and nutrients from watershed (Harper et al 1986 and Johengen & LaRock 1993). Maintains water flow within watershed, providing temporary storage of surface water to reduce local flooding (Smith et al 1995). Provides breeding, nesting, and foraging habitat for insects, reptiles, birds, amphibians, mollusks, and mammals (Haag and Lee 2010).

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

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 RPW (Bullfrog Creek and unamed river/stream) and wetland (Wetland A) directly abutting RPW, that flows directly into TNW (Hillsborough Bay).** RPW and Wetland has more than an insubstantial or speculative effect on the physical, chemical, and biological integrity of the downstream TNW.

PHYSICAL-Collectively RPW and Wetland A contributes fresh water in-flow into TNW. From 2012-2018 the creek discharged on average 41.8 cfs of water into Hillsborough Bay (https://waterwatch.usgs.gov). Wetland function of Wetland A contributes to maintaining water flow (Smith et al 1995) in the watershed (storing flood waters and recharging ground water), directly influencing fresh water flow rates into RPW and downstream into TNW.

CHEMICAL-Pollutant and nutrient loading into TNW is directly affected by the quality of discharge from RPW and Wetland. The Wetland and RPW receives rainfall and stormwater runoff from adjacent areas and transports water and sediments via surface flow, downstream into the TNW. Pollutant and excess nutrient discharge into TNW is associated with higher than normal flows within the RPW. Water quality data from Bullfrog Creek and Hillsborough Bay show seasonal variations in nutrient (nitrogen and phosphorous) and bacteria (fecal coliform) levels, both exhibiting excess levels of nutrients and bacteria during the wet season (www.tampabay.wateratlas.usf.edu). Wetland functions of Wetland A filters and removes pollutants (bacteria and nutrients) from through-flowing water (Harper et al 1986 and Johengen & LaRock 1993), improving the water quality of fresh water being discharged into RPW and downstream into TNW.

BIOLOGICAL- Water quality of TNW is directly affected by the RPW's water quality and flow rate. Since much of the RPW meanders through residential and agricultural areas, higher than normal flows are associated with pollutant and excess nutrient discharge into the TNW which can lead to eutrophication (Stoker et al 1996) and the degradation of water quality in estuarine ecosystems found along the coast line of TNW (Johansson 1991 and Morrison et al 2006). Small changes in water quality such as low dissolved oxygen, high turbidity, and high nutrient levels disrupt normal functioning of the estuarine ecosystem causing a variety of problems such as algae blooms, fish kills, and seagrass die back. Wetland functions remove pollutants (bacteria and nutrients) from through-flowing water and maintain water flow to the RPW by providing temporary storage of surface water and ground water recharge.

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

3. **Non-RPWs[8] 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: .

[8]See Footnote # 3.

☒ 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: Surface water from Wetland A flows through a culvert that runs under Hwy 301 into a perennial un-named stream/river, which flows directly into Bullfrog Creek, a tributary of Hillsborough Bay (the TNW).

Provide acreage estimates for jurisdictional wetlands in the review area: **6.41** 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 jurisidictional. Data supporting this conclusion is provided at Section III.C.

   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.

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

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

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☒ Other non-wetland waters: 0.68 acres. List type of aquatic resource: Remnants of artificial ponds created by excavating and diking dry land to collect and retain water for stock watering (Preamble to 33 CFR Part 328 in the Nov 13, 1986 FR).
☐ 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.***

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: Naylor Environmental Solutions.
☒ 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: .
☒ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): .
  or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☒ Applicable/supporting case law: .
☒ Applicable/supporting scientific literature: See below.
☒ Other information (please specify):

Websites:

Tampa Bay Water Atlas (website accessed on 10/17/ 2019)
http://www.tampabay.wateratlas.usf.edu/river/hydrology.asp?wbodyid=18&wbodyatlas=river

USA.com (website accessed on 10/17/19)
http://www.usa.com/tampa-fl-weather.htm

USGS Streamflow information USGS 02300700 Bullfrog Creek Near Wimauma Fl (website accessed on 10/17/2019)
https://waterwatch.usgs.gov/new/index.php?st=bullfrog+creek&id=wwlmap_viewer&xft=0&choose=&ssonly=1&sspopup=0&snmfb=0&mt=real&mcf=jsontile&search.x=0&search.y=0

Applicable/supporting scientific literature:

Audobon Florida and Lewis Environmental Services. 2015. Bullfrog Creek Aquatic Resource Protection Area Management Plan update for Port Tampa Bay Enviornmental Department

Florida Fish and Wildlife Conservation Commission (FFWCC)-Fish and Wildlife Research Institute. GIS Mapping of Indigo Snake Occurrences Florida

Haag, K. and Lee, T. 2010. Hydrology and Ecology of Freshwater Wetlands in Central Florida-A Primer. Prepared in cooperation with the St. Johns River Water Management District, the Southwest Florida Water Management District and Tampa Bay Water. U.S. Department of the Interior, U.S. Geological Survey.

Harper, H., Wanielista, M., Baker, D., Fries, B., and Livingston, E. 1986. Treatment Efficiencies for Residential Stormwater Runoff in a Hardwood Wetland. Lake and Reservoir Management. 2:1, 351-356.

Johansson J. 1991. Long-term trends of nitrogen loading, water quality and biological indicators in Hillsborough Bay, FL. Proceedings, Tampa Bay Area Scientific Information Symposium 2. 1001 Feb. 27-March 1.

Johengen, T. and LaRock, P. 1993. Quantifying Nutrient Removal Processes Within a Constructed Wetland Designed to Treat Urban Stormwater Runoff. Ecological Engineering, 2(1993) 347-366.

Morrison, G, Sherwood, E, Boler, R, and Barron, J. 2006. Variations in Water Clarity and Chlorophyll a in Tampa Bay, Florida, in Response to Annual Rainfall, 1985-2004. Estuaries and Coasts 29: No 6A- p. 926-931.

Smith. RD., Ammann, A., Bartoldus, C., and Brinson, M.M. 1995. An Approach for Assessing Wetland Functions Using Hydrogeomorphic Classification, Reference Wetlands, and Functional Incies, Wetland Research Program Technical Report, USACE.

Stoker Y. Levesque, V, and Woodham W. . 1996. The Effect of Discharge and Water Quality of the Alafia River, Hillsborough River, and the Tampa Bypass Canal on Nutrient Loading to Hillsborough Bay, Florida. USGS, Water-Resources Investigations Report 95-4107.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

List of Figures

Figure 1: Review Area
Figure 2: Wetland and Surface Waters
Figure 3: Relevant Reach to TNW

Enclosure

Memorandum for Record: Description of Jurisdictional Waters in Review Area (5 pages)

.

Figure 1: Review Area for File Number SAJ-2019-01357 Oak Haven Townhomes, Hillsborough County, FL.

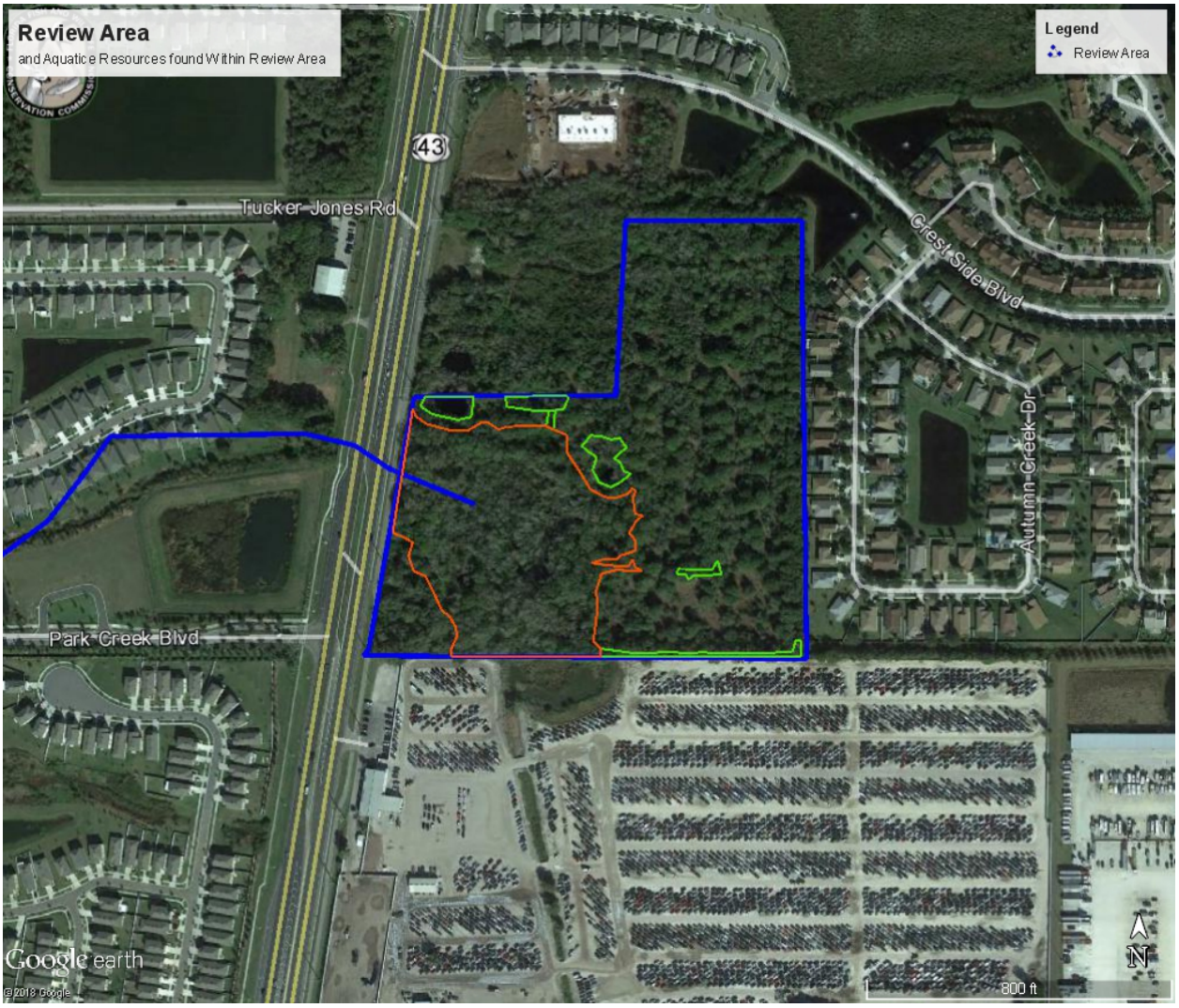
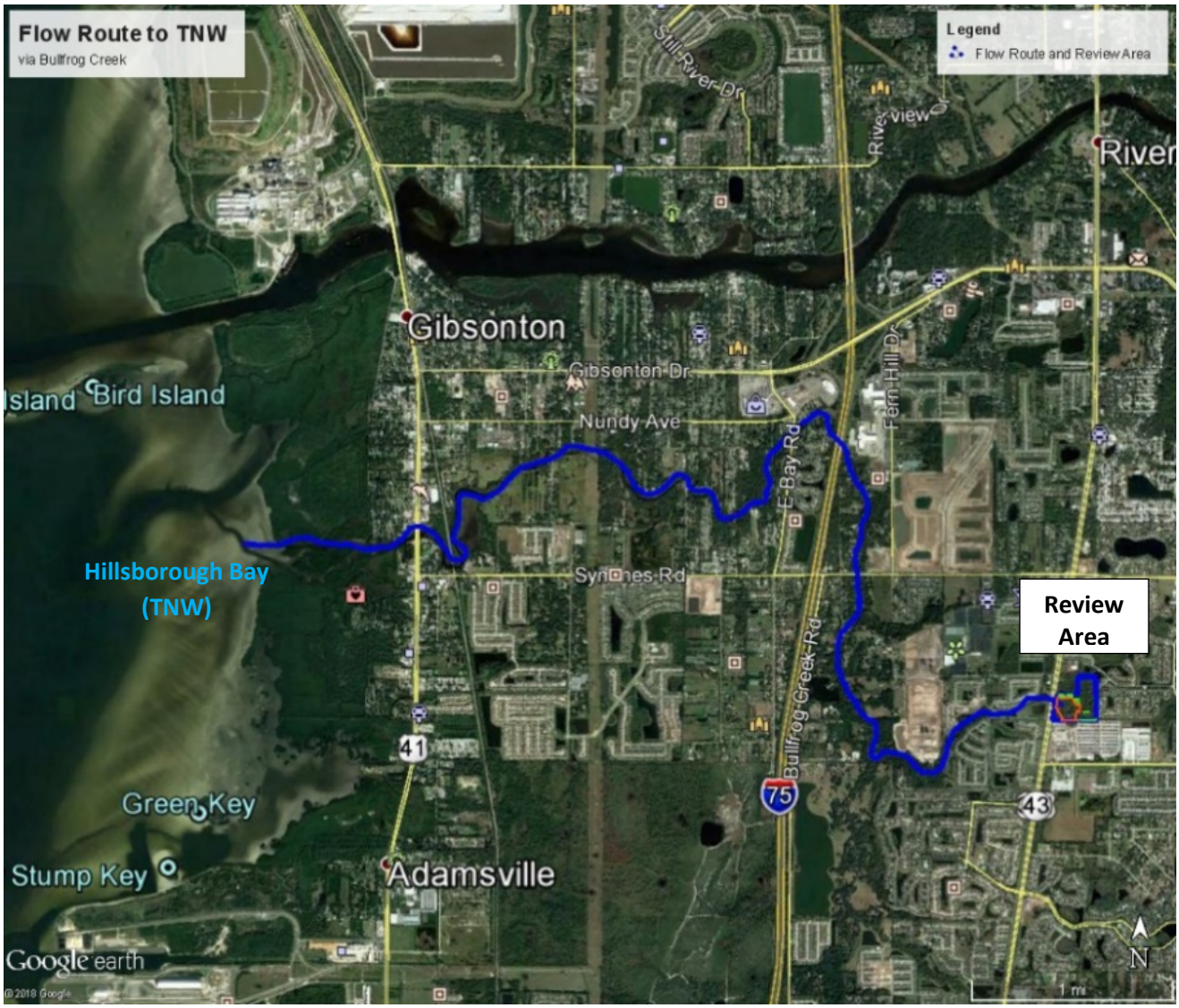


Figure 2: Wetland and Surface Waters in Review Area (File Number SAJ-2019-01357 Oak Haven Townhomes, Hillsborough County, FL.).

Figure 3: Flow Route to TNW (File Number SAJ-2019-01357 Oak Haven Townhomes, Hillsborough County, FL.).



MEMORANDUM FOR RECORD

SUBJECT: Description of Jurisdictional Waters for Approved Jurisdictional Determination, File Number SAJ-2019-01357 Oak Haven Townhomes, Hillsborough County, FL.

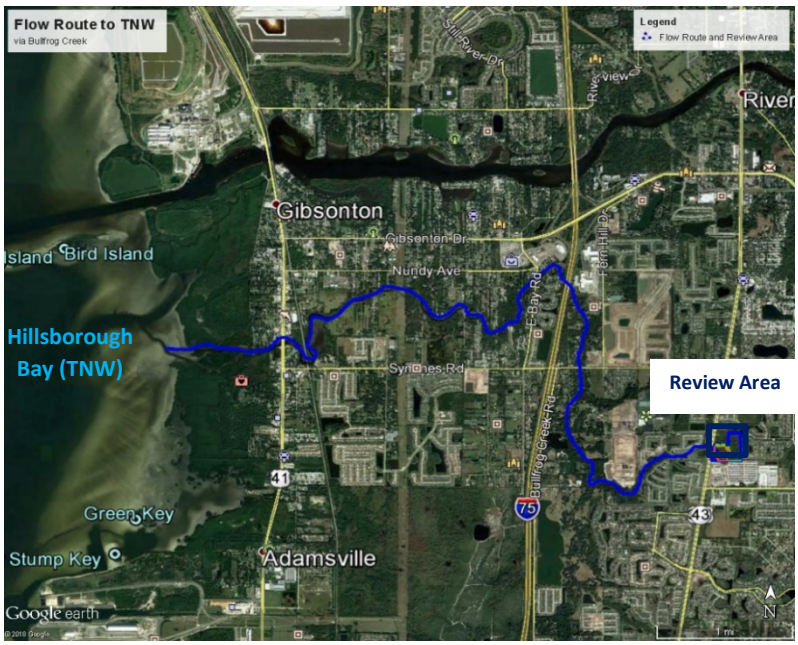
The Corps utilized the June 5, 2007 memorandum that provides guidance for Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States (referred to as "Rapanos Guidance") and 33 CFR 328.3(a) to identify which waters in the review area were subject to jurisdiction under the Clean Water Act. The Corps found the following jurisdictional and non-jurisdictional waters within the review area:

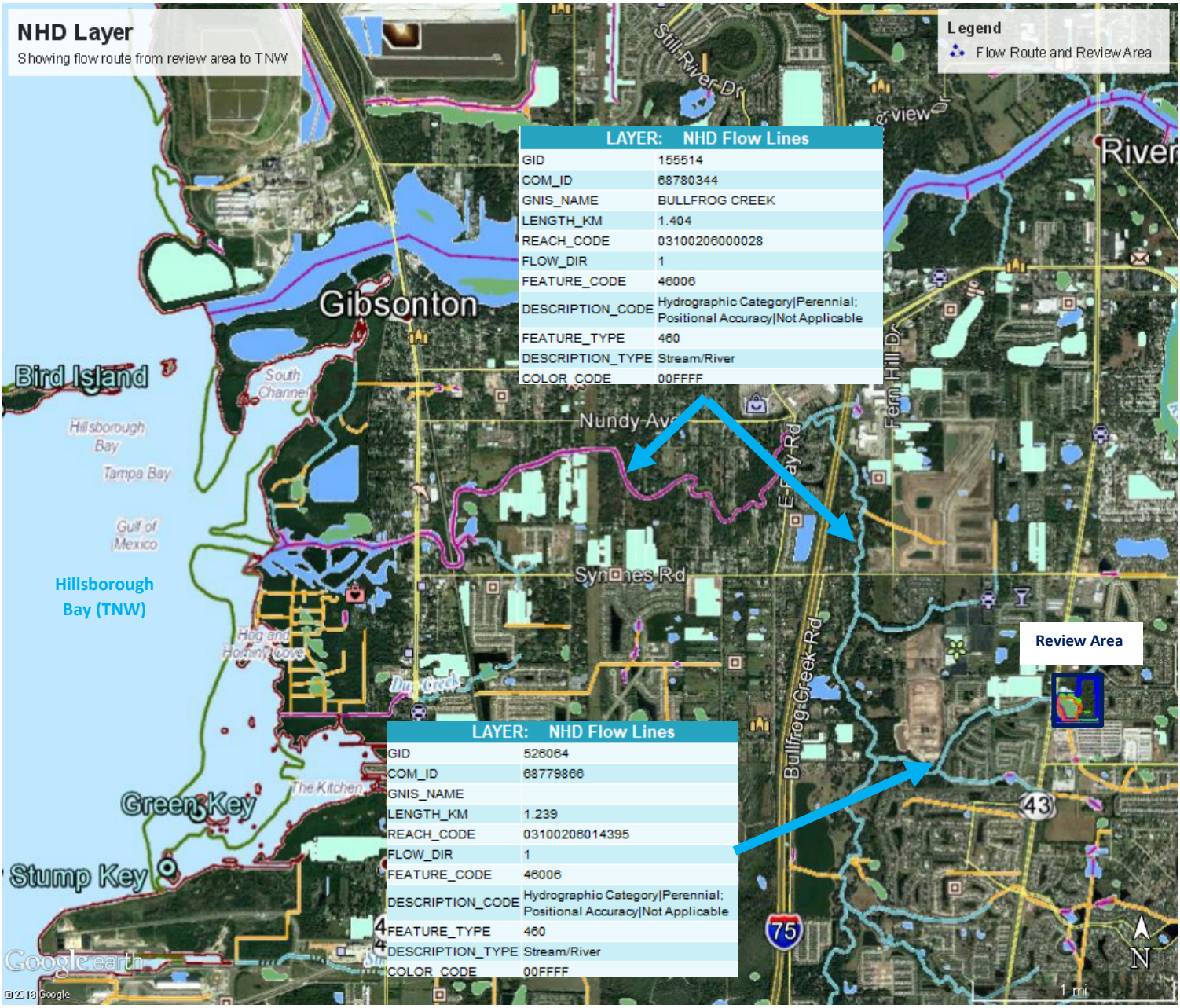
1. <u>Wetland directly abutting a RPW that flows directly into a TNW</u>
   a. Wetland A (6.41 ac):

   Rapanos Guidance states that the Corps should exert jurisdiction over wetlands directly abutting RPWs that flow directly into TNWs. The Corps determined that Wetland A satisfies this standard and is jurisdictional. Surface water from Wetland A flows through a culvert that runs outside the review area, under Hwy 301 into an un-named stream/river, which flows directly into Bullfrog Creek, a tributary of Hillsborough Bay (the TNW).

   Rapanos Guidance states that the Corps should exert jurisdiction over non-navigable tributaries of TNWs that are RPWs where the tributaries typically flow year-round or has a continuous flow at least seasonally (3 months a year). The Corps determined that the unnamed stream/river and Bullfrog Creek satisfies this standard and are jurisdictional RPWs.

   The un-named stream/river and Bullfrog Creek are perennial with an annual discharge rate of 42.9 cfs (https://nwis.waterdata.usgs.gov). Water flow typically follows rainfall patterns (http://www.tampabay.wateratlas) and it rains on average 74 days a year in Tampa, FL with a pronounced wet (July-Sept) and dry (Oct-June) season (http://www.usa.com/tampa-fl-weather.htm). Historic water levels range from 17.2-28.4 ft and current water levels are 18.74 ft (http://www.tampabay.wateratlas).

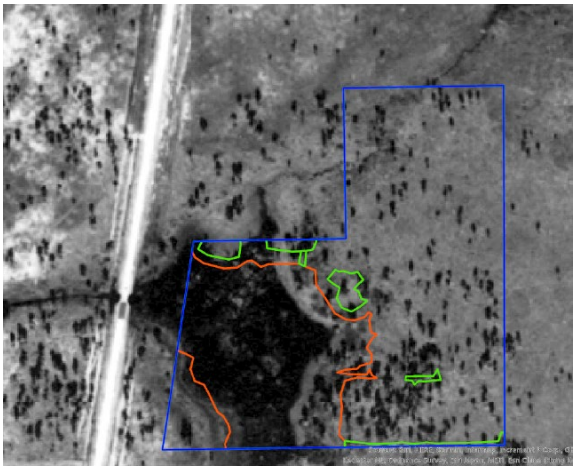



NHD Layer
Showing flow route from review area to TNW
Legend
Flow Route and Review Area
LAYER: NHD Flow Lines
GID 155514
COM_ID 68780344
GNIS_NAME BULLFROG CREEK
LENGTH_KM 1.404
REACH_CODE 03100206000028
FLOW_DIR 1
FEATURE_CODE 46006
DESCRIPTION_CODE Hydrographic Category|Perennial; Positional Accuracy|Not Applicable
FEATURE_TYPE 460
DESCRIPTION_TYPE Stream/River
COLOR_CODE 00FFFF
LAYER: NHD Flow Lines
GID 526064
COM_ID 68779866
GNIS_NAME
LENGTH_KM 1.239
REACH_CODE 03100206014395
FLOW_DIR 1
FEATURE_CODE 46006
DESCRIPTION_CODE Hydrographic Category|Perennial; Positional Accuracy|Not Applicable
FEATURE_TYPE 460
DESCRIPTION_TYPE Stream/River
COLOR_CODE 00FFFF
Gibsonton
Bird Island
South Channel
Hillsborough Bay
Tampa Bay
Gulf of Mexico
Hillsborough Bay (TNW)
Hog and Hominy Cove
Dry Creek
The Kitchen
Green Key
Stump Key
Still River Dr
Nundy Ave
Synnes Rd
Bullfrog Creek Rd
Fern Hill Dr
Review Area
43
75
N
1 mi
Google earth
© 2018 Google

2. <u>Non-regulated waters/wetlands</u>
   a. Other surface waters B, C, D, E, F, G (for a total of 0.68 ac):

      The Corps determined that these aquatic resources are remnants of artificial ponds created by excavating and diking dry land to collect and retain water for stock watering (Preamble to 33 CFR Part 328 in the Nov 13, 1986 FR).

      An examination of the applicant's field observations, soil maps, and a series of aerial photos showed that artificial ponds were created by excavating dry land to collect and retain water for use in commercial fish farming.



Review area and aquatic resources overlain on 1938 aerial photo showing resources on-site prior to construction of fish/artificial ponds. Artificial ponds (other surface waters B, C, D, E, F, G) were clearly excavated in dryland/uplands to retain water for aquaculture purposes.

Review area and aquatic resources overlain on 1965 aerial photo showing extent of artificial ponds created in uplands for aquaculture purposes.

Review area and aquatic resources overlain on 1968 aerial photo showing artificial ponds in operation.

Review area and aquatic resources overlain on 1995 aerial photo showing the operations of artificial ponds being decommissioned.

Review area and aquatic resources overlain on 2002 aerial photo showing a majority of the artificial ponds filled in and being converted back to uplands.

Review area and aquatic resources overlain on 2019 aerial photo showing remnants of artificial ponds and land converted back to uplands.

Review area overlain on NRCS Web Soil Survey Hydric Rating by Unit.