

APPROVED JURISDICTIONAL DETERMINATION FORM

U.S. Army Corps of Engineers

CLAY GULLEY "A" RELEVANT REACH

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

REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 5/4/15 DISTRICT OFFICE, FILE NAME, AND NUMBER: Jacksonville, Wiregrass South of SR-56, SAJ-2014-01064
PROJECT LOCATION AND BACKGROUND INFORMATION: State:Florida County/parish/borough: Pasco City: Wesley Chapel Center coordinates of site (lat/long in degree decimal format): Lat. 28.189519° N, Long82.310120° W. Universal Transverse Mercator: UTM 371417.85E, 3118868N Name of nearest waterbody: Clay Gulley Sub-Basin A Name of nearest Traditional Navigable Water (TNW) Into which the aquatic resource flows: Hillsborough River
Name of watershed or Hydrologic Unit Code (HUC): Clay Gulley Watershed HUC 03100205 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.
REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: Field Determination. Date(s): 7/22/14
CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the
ew area. [Required] Waters subject to the ebb and flow of the tide.
Waters subject to the eoo and now of the fide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
CWA SECTION 404 DETERMINATION OF JURISDICTION.
re 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): 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

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: 21.22 acres.

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

Elevation of established OHWM (if known):Unknown.

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: Wetlands R28, R29, S26, S27, T25F, T26, and U25-1, totaling 4.34 acres, were determined to be isolated and non-jurisdictional.

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).

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 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: 2817 acres
Drainage area: Pick List
Average annual rainfall: +/-50 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 4 tributaries before entering TNW.

Project waters are 5-10 river miles from TNW.

Project waters are 1-2 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: No.

Identify flow route to TNW⁵: UT Clay Gulley "A" (non-RPW) > Clay Gulley (RPW) > Hillsborough River (TNW). Tributary stream order, if known: Third.

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)	(b) General Tributary Characteristics (check all that apply):						
	Tributary is:	✓ Natural✓ Artificial (man-made). Explai✓ Manipulated (man-altered). I		portion culverted by roadway crossings, agricultural			
straightening.							
	Tributary properties with respect to top of bank (estimate): Average width: +/-5 feet Average depth: +/-2 feet Average side slopes: 4:1 (or greater).						
	Primary tributary Silts Cobbles Bedrock Other. Ex			☐ Concrete ☑ Muck			
	Presence of run/ri Tributary geometr	on/stability [e.g., highly eroding, slot ffle/pool complexes. Explain: Mini- ry: Relatively straight t (approximate average slope): Mini-	mal.	Explain: Stable, .			
(c) Flow: Tributary provides for: Seasonal flow Estimate average number of flow events in review area/year: 2-5 Describe flow regime: inconstant. Other information on duration and volume:							
Surface flow is: Confined. Characteristics: Created channel with steep sides.							
	Bed and I OHWM ⁶ clear chan shelv vege leaf I sedir wate	(check all indicators that apply): , natural line impressed on the bank ges in the character of soil ring tation matted down, bent, or absent litter disturbed or washed away ment deposition r staining	destructi the preseses sediment scour multiple	ence of litter and debris on of terrestrial vegetation ence of wrack line a sorting observed or predicted flow events nange in plant community			
	High Ti-	an the OHWM were used to determine the Line indicated by: r scum line along shore objects shell or debris deposits (foreshore) ical markings/characteristics gauges r (list):	Mean High W ☐ survey to a ☐ physical n	at of CWA jurisdiction (check all that apply): (ater Mark indicated by: available datum; narkings; I lines/changes in vegetation types.			
Cha	Explain: Moderat	(e.g., water color is clear, discolored	l, oily film; wat	er quality; general watershed characteristics, etc.).			

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)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): No. Wetland fringe. Characteristics: forested hammock. Habitat for: Federally Listed species. Explain findings: Potential wood stork foraging habitat Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:. Aquatic/wildlife diversity. Explain findings:
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: 21.22 acres (Wetlands R32-1, T28, Q31) Wetland type. Explain: Herbaceous wetland and agricultural ditches. Wetland quality. Explain: Medium. Project wetlands cross or serve as state boundaries. Explain: No.
		(b)	General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain: Wetlands isolated during normal rainfall. Surface flow is: Discrete Characteristics:
		(c)	Subsurface flow: Unknown. Explain findings: □ Dye (or other) test performed: Wetland Adjacency Determination with Non-TNW: □ Directly abutting (Wetlands R32-1 and T28) □ Not directly abutting (Wetland Q31) □ Discrete wetland hydrologic connection. Explain:. □ Ecological connection. Explain:Wetland Q31 is reasonably close to the tributary (~200 feet)
		(d)	☐ Separated by berm/barrier. Explain: 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 50 - 100-year floodplain.
	(ii)	Cha	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: N/A no water in wetland to make determination. titiy specific pollutants, if known: N/A.
3			ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Palustrine forested Vegetation type/percent cover. Explain: Herbaceous/forested freshwater wetlands ~80%. Habitat for: Federally Listed species. Explain findings: Potential wood stork & Eastern indigo snake foraging habitat. Fish/spawn areas. Explain findings:No. Other environmentally-sensitive species. Explain findings: herps/reptiles Aquatic/wildlife diversity. Explain findings: herps/reptiles, wildlife corridor eristics of all wetlands adjacent to the tributary (if any)
3.	Cha	ıracte	erisucs of all wedands adjacent to the tributary (if any)

3.

All wetland(s) being considered in the cumulative analysis: 15-20
Approximately (100) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts	s? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
T28	Y	1.83		
R32-1	Y	18.89 ac.		
Q31	N	0.5		
Offsite on SA	J-2013-0003	31 ~25 (Y)		

Summarize overall biological, chemical and physical functions being performed: Attenuation of stormwater, wildlife foraging and denning, water quality.

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:.

The following represents the significant nexus findings for the UT of Clay Gulley "A" (non-RPW) and its adjacent wetlands (Wetlands O31, R32-1, and T28):

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

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

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

vertebrates³.

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:.

	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:					
	☐ 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 jurisidictional. Data supporting this conclusion is provided at Section III.C.					

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

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

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

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

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

⁸See Footnote # 3.

	wi	Vetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and ith similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this onclusion is provided at Section III.C.
	Provide	e estimates for jurisdictional wetlands in the review area: 21.22 acres. (Wetlands Q31, R32-1, T28)
	As a ge	eneral rule, the impoundment of a jurisdictional tributary remains jurisdictional. emonstrate that impoundment was created from "waters of the U.S.," or emonstrate that water meets the criteria for one of the categories presented above (1-6), or emonstrate that water is isolated with a nexus to commerce (see E below).
E.	DEGRADA SUCH WA' which as from wh which as	D [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, ATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INTERSTATE OR INTERSTATE COMMERCE, INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INTERSTATE OR INTERSTATE COMMERCE, INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INTERSTATE OR INTERSTATE COMMERCE, INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INTERSTATE OR INTERSTATE COMMERCE, INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INTERSTATE OR INTERSTATE COMMERCE, INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INTERSTATE OR INCLUDING ISOLATED WETLANDS, THE USE, AND INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INTERSTATE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INTERSTATE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INTERSTATE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INTERSTATE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INTERSTATE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INTERSTATE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INCLUDING ANY TERS (CHECK ALL THAT APPLY): 10 THE OF THE OR INCLU
	Identify wa	ter body and summarize rationale supporting determination:
	☐ Tributar☐ Other no	mates for jurisdictional waters in the review area (check all that apply): ry waters: linear feet width (ft). on-wetland waters: acres. tify type(s) of waters: ds: acres.
F.	☐ If poter Wetlan ☐ Review ☐ Pr "N ☐ Waters	ISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): Intial wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers and Delineation Manual and/or appropriate Regional Supplements. If a area included isolated waters with no substantial nexus to interstate (or foreign) commerce. If a reining in the 1987 Corps of Engineers and Delineation Manual and/or appropriate Regional Supplements. If a reining is required in the 1987 Corps of Engineers and Delineation Manual and/or appropriate Regional Supplements. If a reining is required in the 1987 Corps of Engineers and Delineation Manual and/or appropriate Regional Supplements. If a reining is required in the 1987 Corps of Engineers and Delineation Manual and/or appropriate Regional Supplements. If a reining is required in the 1987 Corps of Engineers and Delineation Manual and/or appropriate Regional Supplements. If a reining is required in the 1987 Corps of Engineers and Delineation Manual and/or appropriate Regional Supplements. If a reining is required in the 1987 Corps of Engineers and Delineation Manual and/or appropriate Regional Supplements. If a reining is required in the 1987 Corps of Engineers and Delineation Manual and/or appropriate Regional Supplements. If a reining is required in the 1987 Corps of Engineers and Delineation Manual and/or appropriate Regional Supplements. If a reining is required in the 1987 Corps of Engineers and Delineation Manual and/or appropriate Regional Supplements. If a reining is required in the 1987 Corps of Engineers and Delineation Manual and/or appropriate Regional Supplements. If a reining is required in the 1987 Corps of Engineers and Delineation Manual and/or appropriate Regional Supplements. If a reining is required in the 1987 Corps of Engineers and Delineation Manual and Delineation Manual and Delineation Manual and/or appropriate Regional Supplements. If a reining is required in the 1987 Corps of Engineers and Delineation Manual and Deline
	factors (i.e., judgment (c) Non-we Lakes/I Other n Wetlan Provide acrea finding is n Non-we	eage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional check all that apply): etland waters (i.e., rivers, streams): linear feet width (ft). ponds: acres. non-wetland waters: acres. List type of aquatic resource: . nds:4.34 acres. (Wetlands R28, R29, S26, S27, T25F, T26, and U25-1) eage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such required for jurisdiction (check all that apply): etland waters (i.e., rivers, streams): linear feet, width (ft). ponds: acres.
	Other n	non-wetland waters: acres. List type of aquatic resource: . ads: acres.

SECTION IV: DATA SOURCES.

 $^{9}\,\mathrm{To}$ 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.

A.	SUPI	PORTING 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):
	\boxtimes	Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
	\boxtimes	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.
	\boxtimes	U.S. Geological Survey map(s). Cite scale & quad name:1:240000 Wesley Chapel and Thonotosassa.
	\boxtimes	USDA Natural Resources Conservation Service Soil Survey. Citation: .
	\boxtimes	National wetlands inventory map(s). Cite name:Pasco County.
		State/Local wetland inventory map(s): .
		FEMA/FIRM maps: .
		100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
	\boxtimes	Photographs: Aerial (Name & Date):2007.
		or Other (Name & Date): .
	\boxtimes	Previous determination(s). SAJ-2013-00031 (JD-TEH); 4/9/14
		Applicable/supporting case law: .
		Applicable/supporting scientific literature: .
	\boxtimes	Other information (please specify): Aerial with State Jurisdicational Limits and Hydroperiods

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Clay Gulley "A" Jurisdictional Waters			
ID	Acres		
R32-1	18.89		
T28	1.83		
Q31	0.5		
TOTAL	21.22		

Clay Gulley "A" Non-Jurisdictional Waters			
ID	Acres		
R28	0.25		
R29	0.40		
S26	1.16		
S27	0.87		
T25	0.26		
T26	0.59		
U25-1	0.81		
TOTAL	4.34		

Wetland R28 is considered isolated and not adjacent because:

- 1. There is not an unbroken shallow sub-surface connection to jurisdictional waters. The wetlands are surrounded by uplands with with existing topography (natural berms) that limit nurtrient/carbon transport to downstream waters to only peak flow events such as the 100-year storm event. There are no ditches, swales, or even cattle trails that could serve to hydrologically connect the isolated wetland to the downstream non-RPW.
- 2. It is not physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like.
- 3. Its proximity to a jurisdictional water is not reasonably close. This wetland is approximately 1,000 ft from the non-RPW.

Wetland R29 is considered isolated and not adjacent because:

- 1. There is not an unbroken shallow sub-surface connection to jurisdictional waters. The constructed berms surrounding the existing Mansfield Boulevard stormwater treatment pond limit nutrient/carbon transport to downstream waters to only peak flow events (100yr storm events). There are no ditches, swales, or even cattle trails that could serve to hydrologically connect the isolated wetland to the downstream non-RPW.
- 2. It is not physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like.
- 3. Its proximity to a jurisdictional water is not reasonably close. This wetland is approximately 700 ft from the non-RPW.

Wetland S26 is considered isolated and not adjacent because:

- 1. There is not an unbroken shallow sub-surface connection to jurisdictional waters. The wetlands are surrounded by uplands with with existing topography (natural berms) that limit nurtrient/carbon transport to downstream waters to only peak flow events such as the 100-year storm event. There are no ditches, swales, or even cattle trails that could serve to hydrologically connect the isolated wetland to the downstream non-RPW.
- 2. It is not physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like.
- 3. Its proximity to a jurisdictional water is not reasonably close. This wetland is approximately 2,200 ft from the non-RPW

Wetland S27 is considered isolated and not adjacent because:

- 1. There is not an unbroken shallow sub-surface connection to jurisdictional waters. The wetlands are surrounded by uplands with with existing topography (natural berms) that limit nurtrient/carbon transport to downstream waters to only peak flow events such as the 100-year storm event. There are no ditches, swales, or even cattle trails that could serve to hydrologically connect the isolated wetland to the downstream non-RPW.
- 2. It is not physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like.
- 3. Its proximity to a jurisdictional water is not reasonably close. This wetland is approximately 1,400 ft from the non-RPW

Wetland T25 is considered isolated and not adjacent because:

- 1. There is not an unbroken shallow sub-surface connection to jurisdictional waters. The wetlands are surrounded by uplands with with existing topography (natural berms) that limit nurtrient/carbon transport to downstream waters to only peak flow events such as the 100-year storm event. There are no ditches, swales, or even cattle trails that could serve to hydrologically connect the isolated wetland to the downstream non-RPW.
- 2. It is not physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like.
- 3. Its proximity to a jurisdictional water is not reasonably close. This wetland is approximately 2,800 ft from the non-RPW

Wetland T26 is considered isolated and not adjacent because:

- 1. There is not an unbroken shallow sub-surface connection to jurisdictional waters. The wetlands are surrounded by uplands with with existing topography (natural berms) that limit nurtrient/carbon transport to downstream waters to only peak flow events such as the 100-year storm event. There are no ditches, swales, or even cattle trails that could serve to hydrologically connect the isolated wetland to the downstream non-RPW.
- 2. It is not physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like.
- 3. Its proximity to a jurisdictional water is not reasonably close. This wetland is approximately 2,400 ft from the non-RPW

Wetland U25-1 is considered isolated and not adjacent because:

- 1. There is not an unbroken shallow sub-surface connection to jurisdictional waters. The wetlands are surrounded by uplands with with existing topography (natural berms) that limit nurtrient/carbon transport to downstream waters to only peak flow events such as the 100-year storm event. There are no ditches, swales, or even cattle trails that could serve to hydrologically connect the isolated wetland to the downstream non-RPW.
- 2. It is not physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like.
- 3. Its proximity to a jurisdictional water is not reasonably close. This wetland is approximately 2,800 ft from the non-RPW

Furthermore, the above-listed 4.34 acres of non-jurisdictional wetlands could not affect interstate or foreign commerce because they do not contain such waters:

- a. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
- b. From which fish or shellfish are or could be taken and sold interstate or foreign commerce; or
- c. Which are used or could be used for industrial purpose by industries in interstate commerce

U.S. Army Corps of Engineers

CLAY GULLEY "B" RELEVANT REACH

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

SECTION I:	BA	CKGROUND	INFORMATION
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REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 5/4/15

B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: Jacksonville, Wiregrass South of SR-56, SAJ-2014-01064
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:Florida County/parish/borough: Pasco City: Wesley Chapel Center coordinates of site (lat/long in degree decimal format): Lat. 28.189519° N, Long82.310120° W. Universal Transverse Mercator: UTM 371417.85E, 3118868N Name of nearest waterbody: Clay Gully Sub-basin C Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Hillsborough River Name of watershed or Hydrologic Unit Code (HUC): Clay Gulley Watershed HUC 03100205 ☐ 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): 7/22/14
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew 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.
The	ere 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): 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: 10.04 acres.
	c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):Unknown.
	 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: Wetland Z27 (0.9 ac) was determined to be isolated and non-jurisdictional.

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).

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 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: 2817 acres
Drainage area: Pick List
Average annual rainfall: +/-50 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 4 tributaries before entering TNW.

Project waters are 5-10 river miles from TNW.

Project waters are 1-2 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: No.

Identify flow route to TNW⁵: UT Clay Gulley "B" (non-RPW) > Clay Gulley (RPW) > Hillsborough River (TNW). Tributary stream order, if known: Third.

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)	(b) General Tributary Characteristics (check all that apply):						
	Tributary is:	✓ Natural✓ Artificial (man-made). Explai✓ Manipulated (man-altered). Explain		portion culverted by roadway crossings, agricultural			
straightening.							
	Tributary properties with respect to top of bank (estimate): Average width: +/-5 feet Average depth: +/-2 feet Average side slopes: 4:1 (or greater).						
	Primary tributary s Silts Cobbles Bedrock Other. Ex	substrate composition (check all tha Sands Gravel Vegetation. Type/% plain:		☐ Concrete ☑ Muck			
	Presence of run/rif Tributary geometr	n/stability [e.g., highly eroding, slov ffle/pool complexes. Explain: Mining y: Relatively straight (approximate average slope): Mining	mal.	Explain: Stable, .			
(c) Flow: Tributary provides for: Seasonal flow Estimate average number of flow events in review area/year: 2-5 Describe flow regime: inconstant. Other information on duration and volume:							
Surface flow is: Confined. Characteristics: Created channel with steep sides.							
	clear, chang shelvi veget leaf li sedim water other	canks (check all indicators that apply): natural line impressed on the bank ges in the character of soil ing ation matted down, bent, or absent atter disturbed or washed away ment deposition e staining	destructi the preseses sediment scour multiple	ence of litter and debris on of terrestrial vegetation ence of wrack line a sorting observed or predicted flow events nange in plant community			
	☐ High Tid ☐ oil or ☐ fine s ☐ physi	le Line indicated by: scum line along shore objects hell or debris deposits (foreshore) cal markings/characteristics gauges	Mean High W ☐ survey to a ☐ physical n	at of CWA jurisdiction (check all that apply): (ater Mark indicated by: available datum; narkings; I lines/changes in vegetation types.			
Cha	Explain: Moderatl	e.g., water color is clear, discolored	, oily film; wat	er quality; general watershed characteristics, etc.).			

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)		logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): No. Wetland fringe. Characteristics: forested hammock. Habitat for: ☐ Federally Listed species. Explain findings: Potential wood stork foraging habitat ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:.
2	Cha		Aquatic/wildlife diversity. Explain findings:
2.			eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size:10.04 acres (Wetland Y28) Wetland type. Explain: Cypress sloughs Wetland quality. Explain: Medium. Project wetlands cross or serve as state boundaries. Explain: No.
		(b)	General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain: Wetlands isolated during normal rainfall.
			Surface flow is: Discrete Characteristics: .
			Subsurface flow: Unknown. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting (Wetland y28) ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ 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 5-10 aerial (straight) miles from TNW. Flow is from: Wetland to navigable waters. Estimate approximate location of wetland as within the 50 - 100-year floodplain.
	(ii)	Cha	emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: N/A no water in wetland to make determination. artify specific pollutants, if known: N/A.
	(iii)	\boxtimes	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Palustrine forested Vegetation type/percent cover. Explain: Herbaceous/forested freshwater wetlands ∼80%. Habitat for: ☐ Federally Listed species. Explain findings: Potential wood stork & Eastern indigo snake foraging habitat. ☐ Fish/spawn areas. Explain findings:No. ☐ Other environmentally-sensitive species. Explain findings: herps/reptiles ☐ Aquatic/wildlife diversity. Explain findings: herps/reptiles, wildlife corridor
3.	Cha	ract	eristics of all wetlands adjacent to the tributary (if any)

3.

All wetland(s) being considered in the cumulative analysis: 7
Approximately (~162) 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)
Y28 onsite (Y)	10.04		
Y28 offsite (Y)	~14		
SAJ-2013-0031 (Y)	38.0		
Off-site (Y/N)	~100		

Summarize overall biological, chemical and physical functions being performed: Attenuation of stormwater, wildlife foraging and denning, water quality.

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:.

The following represents the significant nexus findings for the UT of Clay Gulley "B" (non-RPW) and its adjacent wetland (Wetland Y28):

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

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

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

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

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

⁸See Footnote # 3.

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

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

1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area: TNWs: linear feet width (ft), Or, acres. Wetlands adjacent to TNWs: acres.
2.	RPWs that flow directly or indirectly into TNWs. ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 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: Approx 1,000 linear feet. Approx 10 width (ft).
	e: The acreage of tributary is included within the overall acreage for wetland Y28, through which the tributary flows, and is sented in Item D(6) below.
	Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: 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.

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

	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: 10.04 acres. (Wetland Y28)
	7.	Impoundments of jurisdictional waters. 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.	SUC 	CLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH 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:
	Ide	ntify water body and summarize rationale supporting determination:
		vide 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.		N-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):
	fact	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (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:0.9 acres. (Wetland Z27)
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ading 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.

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.

SECTION IV: DATA SOURCES.

A.	SUPI	PORTING 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):
	\boxtimes	Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
	\boxtimes	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.
	\boxtimes	U.S. Geological Survey map(s). Cite scale & quad name:1:240000 Wesley Chapel and Thonotosassa.
	\boxtimes	USDA Natural Resources Conservation Service Soil Survey. Citation: .
	\boxtimes	National wetlands inventory map(s). Cite name:Pasco County.
		State/Local wetland inventory map(s): .
		FEMA/FIRM maps: .
		100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
	\boxtimes	Photographs: Aerial (Name & Date):2007.
		or \square Other (Name & Date):
	\boxtimes	Previous determination(s). SAJ-2013-00031 (JD-TEH); 4/9/14
		Applicable/supporting case law: .
		Applicable/supporting scientific literature: .
	\boxtimes	Other information (please specify):Aerial with State Jurisdicational Limits and Hydroperiods.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Clay Gulley "B" Jurisdictional Waters			
ID	Acres		
Y28	10.08		
TOTAL	10.08		

Clay Gulley "B" Non-Jurisdictional Waters			
ID	Acres		
Z27	0.9		
Total	0.9		

Wetland Z27 is considered isolated and not adjacent because:

- 1. There is not an unbroken shallow sub-surface connection to jurisdictional waters. The wetlands are surrounded by uplands with with existing topography (natural berms) that limit nurtrient/carbon transport to downstream waters to only peak flow events such as the 100-year storm event. There are no ditches, swales, or even cattle trails that could serve to hydrologically connect the isolated wetland to the downstream non-RPW.
- 2. It is not physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like.
- 3. Its proximity to a jurisdictional water is not reasonably close. This wetland is approximately 700 ft from the non-RPW.

Furthermore, the above-listed non-jurisdictional wetland could not affect interstate or foreign commerce because it does not contain such waters:

- a. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
- b. From which fish or shellfish are or could be taken and sold interstate or foreign commerce; or
- c. Which are used or could be used for industrial purpose by industries in interstate commerce

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

CLAY GULLEY "C" RELEVANT REACH

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

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REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 5/4/15

B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: Jacksonville, Wiregrass South of SR-56, SAJ-2014-01064
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:Florida County/parish/borough: Pasco City: Wesley Chapel Center coordinates of site (lat/long in degree decimal format): Lat. 28.189519° N, Long82.310120° W. Universal Transverse Mercator: UTM 371417.85E, 3118868N Name of nearest waterbody: Clay Gully Sub-basin C Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Hillsborough River Name of watershed or Hydrologic Unit Code (HUC): Clay Gulley Watershed HUC 03100205 ☐ 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): 7/22/14
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew 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.
The	re 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): 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: 117.43 acres.
	c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):Unknown.
	 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: Wetlands Q30, P30-1, P29, P29-1, Q28, N27, N28-1, L30, and P31-2, totaling 9.11 acres, were determined to be isolated and non-jurisdictional.

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).

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 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: 2817 acres
Drainage area: Pick List
Average annual rainfall: +/-50 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 4 tributaries before entering TNW.

Project waters are 5-10 river miles from TNW.

Project waters are 1-2 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: No.

Identify flow route to TNW⁵: UT Clay Gulley "C" (non-RPW) > Clay Gulley (RPW) > Hillsborough River (TNW). Tributary stream order, if known: Third.

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) straightening.	General Tributary Characteristics (check all that apply): Tributary is: ☐ Artificial (man-made). Explain: ☐ Manipulated (man-altered). Explain: Some portion culverted by roadway crossings, agricultural
	Tributary properties with respect to top of bank (estimate): Average width: +/-5 feet Average depth: +/-2 feet Average side slopes: 4:1 (or greater).
	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: Stable, . Presence of run/riffle/pool complexes. Explain: Minimal. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): Minimal %
(c)	Flow: Tributary provides for: Seasonal flow Estimate average number of flow events in review area/year: 2-5 Describe flow regime: inconstant. Other information on duration and volume:
	Surface flow is: Confined. Characteristics: Created channel with steep sides. Subsurface flow: Unknown. 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): Discontinuous OHWM. 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:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Moderatly clear. tify specific pollutants, if known: Not Known.

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)	Biol	Riparian corridor. Characteristics (type, average width): No. Wetland fringe. Characteristics: forested hammock. Habitat for: Federally Listed species. Explain findings: Potential wood stork foraging habitat Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:: Aquatic/wildlife diversity. Explain findings:
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: 117.43 acres (Wetlands L29, M33, N33, 027, P26) Wetland type. Explain: Cypress sloughs Wetland quality. Explain: Medium. Project wetlands cross or serve as state boundaries. Explain: No.
		(b)	General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain: Wetlands isolated during normal rainfall.
			Surface flow is: Discrete Characteristics: .
			Subsurface flow: Unknown. Explain findings: Dye (or other) test performed:
hvdro	olog		Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting (Wetlands N33 and P26) ☐ Not directly abutting (L29, O27, M33) ☐ Discrete wetland hydrologic connection. Explain:. Wetland 027 has a non-jurisdictional swale connecting to Wetland P26 during 10 yr or less rainfall frequency events.
	sur	roun	 ☑ Ecological connection. Explain: Wetland L29 is reasonably close to the tributary and is only separated by the d the mitigation area that separates it from Wetland N33 and its tributary. M33 is reasonably close to the tributary within ☑ 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 50 - 100-year floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: N/A no water in wetland to make determination. https://doi.org/10.1001/10
	(iii)	\boxtimes	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Palustrine forested Vegetation type/percent cover. Explain: Herbaceous/forested freshwater wetlands ∼80%. Habitat for: ☐ Federally Listed species. Explain findings: Potential wood stork & Eastern indigo snake foraging habitat. ☐ Fish/spawn areas. Explain findings:No. ☐ Other environmentally-sensitive species. Explain findings: herps/reptiles ☐ Aquatic/wildlife diversity. Explain findings: herps/reptiles, wildlife corridor
3.	Cha	All	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: 6 proximately (142) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	<u>Directly abuts? (Y/N)</u>	Size (in acres)
L29 (N)	0.29		
M33 (N)	0.14		
N33 (Y)	39.06		
027 (N)	0.80		
P26 (Y)	77.14		
Off-site (Y)	~25		

Summarize overall biological, chemical and physical functions being performed: Attenuation of stormwater, wildlife foraging and denning, water quality.

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:.

The following represents the significant nexus findings for the UT of Clay Gulley "C" (non-RPW) and its adjacent wetlands (Wetlands L29, M33, N33, 027, P26):

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

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

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

traditional navigable waters². These wetlands have a diverse community of benthic invertebrates, a major food source for vertebrates³.

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

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

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

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:.

υ.	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: Approx 4,585 linear feet. Approx 10 width (ft).
	te: The acreage of tributary is included within the overall acreage for wetlands $P26$ and $N33$, through which the tributary flows, and presented in Item $D(6)$ below.
	Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. ☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. ☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: 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.

⁸See Footnote # 3.

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: 117.43 acres. (Wetlands L29, M33, N33, 027, P26)					
	7.	Impoundments of jurisdictional waters. 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).					
Е.	SUC	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:					
	Ide	dentify water body and summarize rationale supporting determination:					
		vide 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.		N-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): .					
	fact	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional gment (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:9.11 acres. (Wetlands Q30, P30-1, P29, P29-1, Q28, N27, N28-1, L30, and P31-2)					
		wide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such adding 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.					

 $^{^{9}}$ 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.

SECTION IV: DATA SOURCES.

A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below):
	\boxtimes	Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
	X	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:
	П	Corps navigable waters' study:
	П	U.S. Geological Survey Hydrologic Atlas:
		USGS NHD data.
		USGS 8 and 12 digit HUC maps.
	\boxtimes	U.S. Geological Survey map(s). Cite scale & quad name:1:240000 Wesley Chapel and Thonotosassa.
	\times	USDA Natural Resources Conservation Service Soil Survey. Citation:
	\times	National wetlands inventory map(s). Cite name:Pasco County.
		State/Local wetland inventory map(s):
		FEMA/FIRM maps: .
		100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
	\times	Photographs: Aerial (Name & Date):2007.
		or Other (Name & Date):
	\times	Previous determination(s). SAJ-2013-00031 (JD-TEH); 4/9/14
		Applicable/supporting case law:
		Applicable/supporting scientific literature:
	\times	Other information (please specify): Aerial with State Jurisdicational Limits and Hydroperiods.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Clay Gulley "C" Jurisdictional Waters		
ID	Acres	
L29	0.29	
M33	0.14	
N33	39.06	
O27	0.8	
P26	77.14	
TOTAL	117.43	

Clay Gulley "C" Non-Jurisdictional Waters		
ID	Acres	
Q30	3	
P30-1	0.18	
P29	1.08	
P29-1	0.7	
Q28	0.26	
N27	0.03	
N28-1	0.36	
L30	0.7	
P31-2	2.8	
Total	9.11	

Wetlands P30-1, P31-2, and Q-30 are considered isolated and not adjacent because:

- 1. There is not an unbroken shallow sub-surface connection to jurisdictional waters. The wetlands are surrounded by uplands with with existing topography (natural berms) that limit nurtrient/carbon transport to downstream waters to only peak flow events such as the 100-year storm event. There are no ditches, swales, or even cattle trails that could serve to hydrologically connect the isolated wetland to the downstream non-RPW.
- 2. They are not physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like. Aerial photos show that even prior to the construction of the surrounding road network, this set of wetlands was isolated.
- 3. Their proximity to a jurisdictional water is not reasonably close. These wetland are approximately 700 ft from the non-RPW.

Wetlands P29, P29-1 and Q28 are considered isolated and not adjacent because:

- 1. There is not an unbroken shallow sub-surface connection to jurisdictional waters. The wetlands are surrounded by uplands with with existing topography (natural berms) that limit nurtrient/carbon transport to downstream waters to only peak flow events such as the 100-year storm event. There are no ditches, swales, or even cattle trails that could serve to hydrologically connect the isolated wetland to the downstream non-RPW.
- 2. They are not physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like.
- 3. Their proximity to a jurisdictional water is not reasonably close. These wetland are approximately 400 ft from the non-RPW.

Wetland N27 is considered isolated and not adjacent because:

- 1. There is not an unbroken shallow sub-surface connection to jurisdictional waters. The wetlands are surrounded by uplands with with existing topography (natural berms) that limit nurtrient/carbon transport to downstream waters to only peak flow events such as the 100-year storm event. There are no ditches, swales, or even cattle trails that could serve to hydrologically connect the isolated wetland to the downstream non-RPW.
- 2. It is not physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like.
- 3. Its proximity to a jurisdictional water is not reasonably close. This wetland is approximately 400 ft from the non-RPW.

Wetland N28-1 is considered isolated and not adjacent because:

- 1. There is not an unbroken shallow sub-surface connection to jurisdictional waters. The wetlands are surrounded by uplands with with existing topography (natural berms) that limit nurtrient/carbon transport to downstream waters to only peak flow events such as the 100-year storm event. There are no ditches, swales, or even cattle trails that could serve to hydrologically connect the isolated wetland to the downstream non-RPW.
- 2. It is not physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like.
- 3. Its proximity to a jurisdictional water is not reasonably close. This wetland is approximately 600 ft from the non-RPW.

Wetland L30 is considered isolated and not adjacent because:

- 1. There is not an unbroken shallow sub-surface connection to jurisdictional waters. The wetlands are surrounded by uplands with with existing topography (natural berms) that limit nurtrient/carbon transport to downstream waters to only peak flow events such as the 100-year storm event. There are no ditches, swales, or even cattle trails that could serve to hydrologically connect the isolated wetland to the downstream non-RPW.
- 2. It is not physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like.
- 3. Its proximity to a jurisdictional water is not reasonably close. This wetland is approximately 500 ft from the non-RPW.

Wetland L29-1 is considered isolated and not adjacent because:

- 1. There is not an unbroken shallow sub-surface connection to jurisdictional waters. The wetlands are surrounded by uplands with with existing topography (natural berms) that limit nurtrient/carbon transport to downstream waters to only peak flow events such as the 100-year storm event. There are no ditches, swales, or even cattle trails that could serve to hydrologically connect the isolated wetland to the downstream non-RPW.
- 2. It is not physically separated from jurisdictional waters by man-made dikes or barriers, natural river berms, beach dunes, and the like.
- 3. Its proximity to a jurisdictional water is not reasonably close. This wetland is approximately 900 ft from the non-RPW.

Furthermore, the above-listed 9.11 acres of non-jurisdictional wetlands could not affect interstate or foreign commerce because they do not contain such waters:

- a. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
- b. From which fish or shellfish are or could be taken and sold interstate or foreign commerce; or
- c. Which are used or could be used for industrial purpose by industries in interstate commerce