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

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

SE	CTION I: BACKGROUN	DINFORMATION	and the second s
A.	REPORT COMPLETIO	N DATE FOR APPROVED JURISDI	CTIONAL DETERMINATION (JD): September 8, 2014
B.	DISTRICT OFFICE, FIL 00580	E NAME, AND NUMBER: Savanna	h District, Southern Comfort 40 Acre Tract, SAS-2014-
	PROJECT LOCATION	AND BACKGROUND INFORMATIC	N: 40 acres NE of GA Hwy 150 and Stagecoach Road
	A CARACTURE CONTRACTOR	County/parish/borough: McDuffie	City: Project is not within the City Limits of Thomson
	Universal	Transverse Mercator: 17 367162.12	: Lat. 33.52357117312°, Long82.4304564249124° 3710248.46
	Name of watershed or F Check if map/diagram	onal Navigable Water (TNW) into wh tydrologic Unit Code (HUC): Middle m of review area and/or potential juri (e.g., offsite mitigation sites, disposal	ich the aquatic resource flows: Greenbrier Creek Savannah. Georgia, South Carolina., 03060105 sdictional areas is/are available upon request. sites, etc) are associated with this action and are recorded
D.		FOR SITE EVALUATION (CHECK	ALL THAT APPLY):
	☐ Office (Desk) Determination.	nination. Date: Date(s): August 26, 2014	
SE	CTION N: SUMMARY O	FFINDINGS	
		ERMINATION OF JURISDICTION.	
	the review area. [Required] Waters subject to the	 diplomation of the tide. diplom	t, or may be susceptible for use to transport interstate or foreign
B.	CWA SECTION 404 DE	TERMINATION OF JURISDICTION	
	ere Are no "waters of the equired]	U.S." within Clean Water Act (CWA)	jurisdiction (as defined by 33 CFR part 328) in the review area.
	☐ TNWs, includ ☐ Wetlands adja ☐ Relatively per ☐ Non-RPWs th ☐ Wetlands dire ☐ Wetlands adja ☐ Wetlands adja ☐ Impoundment ☐ Isolated (inter	manent waters? (RPWs) that flow directly not indirectly into TNW actly abutting RPWs that flow directly acent to but not directly abutting RPV acent to non-RPWs that flow directly to of jurisdictional waters state or intrastate) waters, including te) size of waters of the U.S. In the	rectly or indirectly into TNWs or indirectly into TNWs Vs that flow directly or indirectly into TNWs or indirectly into TNWs isolated wetlands review area:
	c. Limits (boundar	ries) of jurisdiction based on Pick	List
	Elevation of esta	blished OHWM (if known):	
	Non-regulated wat Potentially jurisi	ers/wetlands (check if applicable): dictional waters and/or wetlands were	s e assessed within the review area and determined to be not

SECTION III: CWA ANALYSIS

jurisdictional. Explain: Please see explanation on last page of this document

Boxes checked below shall be supported by completing the appropriate sections in Section III below.

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

A. THWS AND WETLANDS ADJACENT TO THWS

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 TWW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

TNW Identify TNW:

Summarize rationale supporting determination:

Wetland adjacent to TNW Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

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

(i) General Area Conditions: Pick List Watershed size: Drainage area: Pick List Average annual rainfall: inches Average annual snowfall: (ii) Physical Characteristics: (a) Relationship with TNW: Tributary flows directly into TNW. Tributary flows through Pick List tributaries before entering TNW. Project waters are Fick List river miles from TNW. Project waters are Fick List river miles from RPW. Project waters are Pick List serial (straight) miles from TNW. Project waters are Pick List serial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain: Identify flow route to TNW5: Tributary stream order, if known:

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

Note that the Instructional Guidehook contains additional information regarding swales, ditches, washes, and crosional features generally and in the arid-

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.

	+3-						
	Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:						
	Tributary properties with respect to top of bank (estimate): Average width: feet Average depth: feet Average side slopes: Pick List.						
	Primary tributary substrate composition (check all that epply): Silts Sands Concrete Cobbles Gravei Muck Bedrock Vegetation. Type/% cover: Other. Explain:						
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Presence of run/riffle/pool complexes. Explain: Tributary geometry: Pick List Tributary gradient (approximate average slope):						
	(c) Flow: Tributary provides for. Pick List Estimate average number of flow events in review arealyear. Pick List Describe flow regime: Other information on duration and volume:						
	Surface flow is: Pick List Characteristics: Subsurface flow Pick List Explain findings: Dye (or other) test performed:						
	Tributary has (check all that apply): Bed and banks Check all indicators that apply): clear, natural line impressed on the bank the presence of litter and debris destruction of terrestrial vegetation shelving the presence of wrack line vegetation matted down, bent, or absent sediment sorting leaf litter disturbed or washed away scour sediment deposition multiple observed or predicted flow events water staining abrupt change in plant community other (list): Discontinuous OHWM. Explain:						
apply):	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all to):						
	 ☐ High Tide Line indicated by: ☐ oil or scum line along shore objects ☐ fine shell or debris deposits (foreshore) ☐ physical markings: ☐ other (list): ☐ other (list): ☐ Mean High Water Mark indicated by: ☐ physical markings (foreshore) ☐ physical markings: ☐ physical markings: ☐ vegetation lines/changes in vegetation types. 						
	(iii) Chemical Characteristics: Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Identify specific pollutants, if known:						
	(iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Habitat for:						

[&]quot;A natural or man-made discontinuity in the OHWM does not recessarily 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 outerop or through a culvert), the agencies will look for indicators of flow above and below the break.

Third.

			☐ Fish/spawr	areas. E	cies. Explain findings: Explain findings: ly-sensitive species. Ex sity. Explain findings:	plain findings:	
2	Cha	arac	teristics of wet	iands ad	jacent to non-TNW tha	t flow directly or indirectly in	to TNW
(i) Physical Characteristics: (a) General Wetland Characteristics; Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain; Project wetlands cross or serve as state boundaries. Explain:						aries. Explain:	
		(b)	General Flow Flow is. Pick I		hip with Non-TNW: ain:		
			Surface flow is Characteria	C	st		
					ist Explain findings: et performed:		
		(c)	☐ Directly ab ☐ Not directly ☐ Discrete ☐ Ecologi	utting abutting wetland cal conne	hydrologic connection. ction. Explain: mybarrier. Explain:		
		(d)	Project waters Flow is from:	ds are Pick are Pick Tick List	k List river miles from List aerial (straight) mi		
	(ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:						
	(iii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:						
3.	Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately 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)

Summarize overall biological, chemical and physical functions being performed:

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 elituations, 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 Repands 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:

- 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:
- 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:
- 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 WATERSWETLANDS ARE (CHECK ALL THAT APPLY):

1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area: TNWs: linear feet, wide, 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 wide, 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, wide. Other non-wetland waters: acres.				

See Footnote # 3.

identify type(s) of waters:

Ε.

	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.						
	5.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.						
		Provide estimates for jurisdictional wetlands in the review area: acres.						
	7.	Impoundments of jurisdictional waters. ⁸ 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 (1-8), or Demonstrate that water is isolated with a nexus to commerce (see E below).						
€.	DE WILLIAM	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH ATTERS (CHECK ALL THAT APPLY): 10 which are or could be used by interstate or foreign travelers for recreational or other purposes. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce. Which are or could be used for industrial purposes by industries in interstate commerce.						
	Interstate isolated waters. Explain: Other factors. Explain:							
	Identify water body and summarize rationale supporting determination:							
		ovide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet, wide. Other non-wetland waters: acres. Identify type(s) of waters:						
		Wetlands: acres.						
F.		M-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):						

³ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

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

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

the	MBR factors (i.e., presence of	migratory birds	, presence of end				
	ng best professional judgment (A WAS			
	Non-wetland waters (i.e., rivers Lakes/ponds: acres.	, streams):	linear feet,	wide.			
-	Other non-wetland waters:	come lists	pe of aquatic res	Milmo.			
_	Wetlands: 0.12 acres.	SU(S). LIST (the or advancines	Juice.			
wh	Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):						
	Non-wetland waters (i.e., rivers Lakes/ponds: acres.	, streams):	linear feet,	wide.			
_	Other non-wetland waters: Wetlands: acres.	acres. List t	type of aquatic res	ource:			
SECTIO	ON IV: DATA SOURCES.						
	SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and where checked and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheels 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 sheels prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Affas: USGS NHD data. USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: 1:24K; GA-WINFIELD USDA Natural Resources Conservation Service Soil Survey, Citation: NRCS Soil Survey National wetlands inventory map(s). Cite name: USFWS NWI State/Local wetland inventory map(s). FEMA/FIRM maps: FEMA Firmette 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date): Google Earth Aerials past and current or Other (Name & Date): Previous determination(s). File no. and date of response letter: Applicable/supporting case law: Applicable/supporting scientific literature: Other information (please specify):						

B. ADDITIONAL COMMENTS TO SUPPORT JD:

The 0.12-acre non-jurisdictional isolated wetland is not located within the 100-year floodplain and appears to be a shallow excavated area that is most likely from past borrow/silviculture operations on the site and historical aerial photos show the area to have been there since prior to 1993. The wetland is located approximately 1500 feet from the nearest un-named intermittent stream and Greenbrier Creek is approximately 5550 feet east of the site and flows to where it meets the Savannah River approximately 15 miles northeast of the site. The uplands surrounding the isolated wetland are approximately six to eight feet higher in elevation than the surface elevation of the isolated wetland. The soils in the uplands surrounding the isolated wetland are mapped as Orangeburg Sandy Loam and Norfolk Loamy Sand and due to the distance from the isolated wetland to the nearest jurisdictional water and the elevation difference between the bottom of the wetland and the surrounding uplands, it would be difficult to document a subsurface connection between the isolated wetland and the nearest jurisdictional waters. The vegetation surrounding the isolated wetland consists of typical cutover/managed Loblolly Pine.