

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 30 November 2011

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Mobile District CESAM-RD-I-S, Canebrake Utilities Association, SAM-2011-01392-LET

C. PROJECT LOCATION AND BACKGROUND INFORMATION: 79 acre parcel of land west of MS Hwy 589 and south of Wiggins Lane. Property contains 14.65 acres of jurisdictional wetlands and 13.96 acres of open water ponds constructed in wetlands.

State: Mississippi County/parish/borough: Lamar City: west Hattiesburg
Center coordinates of site (lat/long in degree decimal format): Lat. 31.30131° **N**, Long. -89.47535° **W**.
Universal Transverse Mercator: Zone 16 X: 264400.40 Y: 3465640.54

Name of nearest waterbody: Parkers Creek

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

Name of watershed or Hydrologic Unit Code (HUC): (8-digit) 03170007 Black Creek, MS

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: 18 November 2011

Field Determination. Date(s): 21 November 2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
- Wetlands adjacent to TNWs
- Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
- Non-RPWs that flow directly or indirectly into TNWs
- Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
- Impoundments of jurisdictional waters
- Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or 13.96 acres.

Wetlands: 14.65 acres.

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

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

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

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain:

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

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

(i) **General Area Conditions:**

Watershed size: 811,268.86 acres

Drainage area: approximately 250 acres

Average annual rainfall: approximately 60.6 inches

Average annual snowfall: < 0.5 inches

(ii) **Physical Characteristics:**

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **30 (or more)** river miles from TNW.

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

Project waters are **30 (or more)** 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: Parkers Creek, which the JD site ponds and wetlands drain into, does not cross or serve as a State boundary.

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

Identify flow route to TNW⁵: The open waters (ponds) and wetlands on the JD site flow into Parkers Creek which flows into Black Creek near river mile 114 which is approximately 85.5 miles upstream from river mile 29 which is the point at which the Section 10 TNW designation of Black Creek ends.

Tributary stream order, if known:

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

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

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

Average width: approximately 10 to 12 feet

Average depth: unknown feet

Average side slopes: **2:1**.

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: Based on review of available aerial photography and FEMA mapping, Parkers Creek has a generally stable channel with an associated 100 year floodplain.

Presence of run/riffle/pool complexes. Explain: This feature cannot be accurately assessed from aerial photography.

Tributary geometry: **Meandering**

Tributary gradient (approximate average slope): unknown %

(c) Flow:

Tributary provides for: **Seasonal flow**

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

Describe flow regime: Parkers Creek is a continuously flowing perennial stream.

Other information on duration and volume: No other tributary specific information or gauge station data is available for Parkers Creek.

Surface flow is: **Discrete and confined**. Characteristics: Parkers Creek exhibits a defined bed and bank morphology with a predominantly hardwood forested wetland riparian corridor within a 100-year floodplain.

Subsurface flow: **Pick List**. Explain findings: Subsurface flow was not evaluated.

Dye (or other) test performed:

Tributary has (check all that apply):

Bed and banks
 OHWM⁶ (check all indicators that apply):
 clear, natural line impressed on the bank the presence of litter and debris
 changes in the character of soil destruction of terrestrial vegetation
 shelving the presence of wrack line
 vegetation matted down, bent, or absent sediment sorting
 leaf litter disturbed or washed away scour
 sediment deposition multiple observed or predicted flow events
 water staining abrupt change in plant community
 other (list):
 Discontinuous OHWM.⁷ Explain:

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

High Tide Line indicated by: Mean High Water Mark indicated by:
 oil or scum line along shore objects survey to available datum;
 fine shell or debris deposits (foreshore) physical markings;
 physical markings/characteristics vegetation lines/changes in vegetation types.
 tidal gauges
 other (list):

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

⁶ A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷ Ibid.

(iii) Chemical Characteristics:

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

Explain: The watershed of Parkers Creek is currently predominantly low to moderate density rural residential land with large acreages of silvicultural use and agricultural or pasture land. There are no large industrial or substantial commercial discharge or run-off that would result in significant chemical or petroleum inputs to the creek at this time. Based on land use analysis from aerial photography the most likely pollutant inputs to the creek would be run-off from pesticide, herbicide and fertilizer applications, sediment run-off from disturbed silviculture and agriculture lands and borrow pits, and possible human and animal bacteriological inputs from livestock pastures or failing septic systems.

Identify specific pollutants, if known: No known pollutant impairments to the water quality of Parkers Creek have been identified through the 303(d) evaluation and listing process.

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

Riparian corridor. Characteristics (type, average width): Creek has mixed broad-leaf deciduous and evergreen hardwood, scrub-shrub, and pine forested wetland riparian corridor within and beyond a 100-year floodplain along the creek. Riparian corridor has natural forested vegetative cover and on average is approximately 1,300 feet wide (approximately 650 ft. wide each side of the creek channel).

Wetland fringe. Characteristics:

Habitat for:

Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings: The tributary helps convey organic carbon and nutrients from decaying riparian plant material downstream to the resident aquatic invertebrates, and aquatic and terrestrial vertebrates spawning, foraging, seeking shelter from predators, and/or residing permanently in the creek and downstream tributary system and adjacent riparian lands.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: 14.65 acres

Wetland type. Explain: Bayhead wetland seepage drain consisting predominantly of broad-leaf deciduous dominated forest and herbaceous, scrub-shrub, pine and willow mixed fringe around the margins of two impounded open water features historically constructed in the upper reaches of the bayhead wetland drain.

Wetland quality. Explain: The large area of mature contiguous bayhead wetland drain to the west of the ponds on the property is high quality wetlands with dominant native vegetative species representation such as *N. biflora*, *N. sylvatica*, *M. virginiana*, *A. rubrum*, *P. borbonia*, *M. heterophylla*, *L. lucida*, *L. tulipifera*, and *W. aerolata*. The ponds historically constructed on the east side of the property and past land uses have adversely impacted the upper reach of the wetland drain fragmenting it, through dam and access road installation, it into segments of low quality wetlands and open water with wetland fringe. There is an old area of drained pond which is now *S. nigra* and *T. sebiferum* dominated and further impacted by years of trash dumping, and a remaining reach of wetland drain south of the ponds has been adversely affected by silviculture activities including soil re-distribution, row planting of pines that did not exist in the area naturally, and installation of an unculverted road crossing berm. The result of these activities has been an increase of hydrology in the remaining wetland area above the road berm although no extended ponding, a reduction of hydrology in the wetland drain area between the downstream side of the road and one of the ponds resulting in increased facultative invasive species presence including *T. sebiferum* and *L. sinense* rather than native wetland species being present, and replacement of native wetland tree species by planted pines and their re-generation.

Project wetlands cross or serve as state boundaries. Explain: Project wetlands DO NOT cross or serve as State boundaries.

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: Water flows from the JD area wetland drain and ponds to Parkers Creek when there is sufficient saturation and/or inundation from rainfall and the winter seasonal high water table that the water seeps along the ground surface as overland flow, or when surface water run-off from storm events flows from uplands through the wetlands and ponds to the creek.

Surface flow is: **Overland sheetflow**

Characteristics: Water flow through the wetlands is most commonly overland flow from run-off from precipitation events or from sufficient groundwater saturation to the soil surface that the water forms shallow flows across the ground running down gradient toward the creek.

Subsurface flow: **Pick List**. Explain findings: Subsurface flow was not evaluated.

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

Ecological connection. Explain:

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **30 (or more)** river miles from TNW.

Project waters are **30 (or more)** aerial (straight) miles from TNW.

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

Estimate approximate location of wetland as within the **500-year or greater** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: There were no areas of appreciable standing water in the wetlands with the exception of a small area of very shallow pooling around a strong seepage or small spring head located in the uppermost extent of the wetland drain extending south of the ponds on the property. The standing water within the ponds constructed in the wetland drain was clear is area was clear with a natural slightly tannic dark orangish-brown coloration as a result of release of tannic acid during the natural decomposition of organic material and vegetation. There was no surface film or petroleum sheen on the ponds, which had numerous lily pads (likely *Nymphaea odorata*) floating on the water surface. Identify specific pollutants, if known: No known chemical or petroleum pollutants to the wetlands.

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

Riparian buffer. Characteristics (type, average width): The wetlands in the JD area are part of a mixed broad-leaf deciduous and evergreen hardwood, scrub-shrub, and pine forested wetland riparian buffer corridor within and beyond a 100-year floodplain along Parkers Creek. The riparian corridor provides on average is approximately 1,300 feet wide (approximately 650 ft. wide each side of the creek channel) buffer from development impacts along Parkers Creek. There is also a herbaceous and scrub-shrub fringe around margins of standing water within the two ponds that were historically constructed by excavation and fill placement in the upper reach of the JD area wetland drain.

Vegetation type/percent cover. Explain: The dominant plant species in the JD area have Fac to Obl Region 2 wetland indicator status and include species such as *Nyssa biflora*, *Nyssa sylvatica*, *Magnolia virginiana*, *Myrica heterophylla*, *Salix nigra*, *Scirpus cyperinus*, *Acer rubrum*, *Ligustrum sinense*, *Triadica sebiferum*, *Liriodendron tulipifera*, *Eliocharis* sp. and *Rhynchospora* sp.

Habitat for:

Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings: The wetlands provide resting, foraging, refuge, and nesting, reproduction and nursery habitat for amphibians, reptiles, migratory and wading birds, water fowl, and small to large mammals that reside in or periodically utilize the area.

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

All wetland(s) being considered in the cumulative analysis: 1

Approximately (47) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Y	approximately 47		

Summarize overall biological, chemical and physical functions being performed: The estimated 47 acres of wetlands being considered in the cumulative analysis for relevant reach of the wetlands abutting and extending uphill from Parkers Creek for this jurisdictional determination consist of the forested riparian wetland system directly abutting the creek. This area is being considered as a single continuous wetland drain abutting the creek. This wetland system provides 1) a groundwater discharge source or area of water recharge to the tributary, 2) it provides water purification functions to the RPW and TNW by moderating the flow of water entering those streams 3) provide capacity to receive and retain floodwater resulting in removal of sediment, trash, fertilizers, pesticides, other chemicals, animal and other biological wastes, etc. that may be picked up in stormwater run-off from residential properties and silvicultural and agricultural activities that can enter the creek from surrounding lands. The ability to receive and retain stormwater also provides flood attenuation functions for developed upland areas and the vegetation provides roughness to slow the velocity of stormwater that may flow across the floodplain. The similarly situated wetlands in this system that drains to Parkers Creek also provide a natural corridor for wildlife to utilize while carrying out their daily functions such as foraging for food and water and seeking shelter for nesting and reproduction, or as refuge from predators. The fruits, nuts, and seeds of plants, and detritus and decomposition of organic matter from the wetlands also provide nutrients and organic carbon to the RPWs and downstream TNW for use by wildlife and fish on-site and in downstream food chains.

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

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-RPWs⁸ that flow directly or indirectly into TNWs.**

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
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: **The bay-head hardwood forested wetland drain within the review area is a continuous wetland corridor extending upslope from Parkers Creek and it's 100-year floodplain into the 79 acre property which is the subject JD area. There are also 13.96 acres of open water within the JD area which are composed of a consecutive series of 2 ponds that were historically constructed within the wetland drain sometime between 1972 and 2004 based on available aerial photography. Based on review of multiple desktop resources including NWI mapping, USGS topographic maps, current web soil survey maps, and historic mapping available in the 1975 soil survey book, the wetlands within the review area are not physically separated from the tributary by upland berms, roadways or other man-made physical barriers that have severed the exchange of water flow between the jurisdictional features nor has an expanse of natural uplands ever existed that severs the surface hydrology connection between Parkers Creek and the wetland drain within the JD area. See attached topo map.**
 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: **14.65** acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

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

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

⁸See Footnote # 3.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: _____
- Other factors. Explain: _____

Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area (check all that apply):

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

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

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

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

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

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

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

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: _____
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.

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.

- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000 7.5 minute Hattiesburg SW, MS.
- USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey, Lamar County, Mississippi. Available online at <http://websoilsurvey.nrcs.usda.gov/> accessed [11/18/2011] and Soil Survey of Lamar County, Mississippi issued October 1975 by USDA Soil Conservation Service and MS Agriculture and Forestry Experiment Station - Sheet Number 13.
- National wetlands inventory map(s). Cite name: data Hattiesburg SW, MS scanned data from USFWS NWI on-line wetlands mapper at <http://www.fws.gov/wetlands/Data/mapper.html>.
- State/Local wetland inventory map(s):
- FEMA/FIRM maps: Lamar County, MS and Incorporated Areas, Map No. 28073C0140E, Revised Effective date March 2, 2010.
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs:
 - Aerial (Name & Date): Color aerial photograph submitted by wetland delineator with delineation report; color aerial photograph provided in Web Soil Survey reports; color aerial photographs dated 8/12/2004, 6/6/2006, 6/7/2006, 12/22/2006, and 8/7/2007 printed from Google Earth Pro; black and white aerial photographs taken in 1972 available in 1975 Soil Survey of Lamar County, MS.
 - or Other (Name & Date): Color digital photographs taken by wetland delineator during September 2011 field sampling and submitted with delineation report, and color digital photographs taken by USACE project manager during 21 November 2011 field review.
- 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: