

**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): 24 February 2010**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Mobile District CESAM-RD-I-S, McGowin Properties Interstate Subdivision 18.8 acre parcel, SAM-2007-775-LET**

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State: Alabama County/parish/borough: Mobile City: Mobile  
Center coordinates of site (lat/long in degree decimal format): Lat. 30.64508° **N**, Long. -88.12169° **W**.  
Universal Transverse Mercator: Zone 16 X: 392518.33 Y: 3390805.04

Name of nearest waterbody: Montlimar Creek and UT to Bolton Branch

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

Name of watershed or Hydrologic Unit Code (HUC): (12-digit) 031602050202 Upper Dog River, (8-digit) 03160205

- 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: 4 February 2010  
 Field Determination. Date(s): 10 February 2010

**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):<sup>1</sup>**

- TNWs, including territorial seas  
 Wetlands adjacent to TNWs  
 Relatively permanent waters<sup>2</sup> (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: 3.4 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):<sup>3</sup>**

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.  
Explain: **An approximately 9.0 acre area of the 18.8 acre property previously delineated in September 2007 as being**

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

<sup>2</sup> 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).

<sup>3</sup> Supporting documentation is presented in Section III.F.

wetlands was re-evaluated using an array of 12 groundwater monitoring wells which were installed and monitored weekly over a one year period from February 11, 2008 until February 9, 2009 to evaluate whether wetland hydrology still exists across the previously defined 9.0 acre area. According to NRCS National Water & Climate Center WETS data the average annual rainfall for the Mobile area ranges from 59.66 inches to 70.62 inches with NOAA-NWS Weather Forecast Office data showing a 30 year normal (1971-2001) annual rainfall total for the Mobile area at 66.29 inches. Based on NOAA-NWS monthly climate reports for Mobile over the one year monitoring period, approximately 66.20 inches of rainfall was received during the monitoring period, which places rainfall for the monitoring year within the observed normal range. The consultant's report on the well installation and monitoring activities states that the 1987 Wetland Delineation Manual prescribes soil saturation at 12 inches for sandy/loamy soils and 18 inches for clayey/silty soils, therefore due to the presence of soils comprised of zones of both clayey and sandy loam soils the target groundwater elevation chosen to demonstrate wetland hydrology at this site was 15-inches (an average of the 12 and 18 inch saturation thresholds). Analysis of the well data after the year of monitoring showed that approximately 3.4 acres of the 9.0 acres previously determined to be wetlands had 14 or more consecutive days of inundation and/or groundwater elevation readings at 15 inches or less from the soil surface.

**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<sup>4</sup> 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: (8 digit HUC) 560,998.875 acres

Drainage area: Approximately 30 acres

Average annual rainfall: 65 inches

Average annual snowfall: None inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through 2 tributaries before entering TNW.

Project waters are 1-2 river miles from TNW.

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

Project waters are 1-2 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: Project waters DO NOT CROSS or SERVE as State

boundaries.

<sup>4</sup> 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 TNW<sup>5</sup>: A drainage ditch tributary flows southwest from a wetland area and roadside ditch east of I-65 through a culvert under the Interstate into the southeastern quadrant of the approximately 18.8 acre parcel and is quickly (within a few hundred feet) drained back off the property to the east through an excavated drainage ditch at the south end of the JD property and a culvert under the Interstate. On the east side of I-65 the drainage ditch tributary is located south of Hank Aaron Baseball Stadium and flows in an easterly direction into Bolton Branch east of Satchel Paige Drive. Bolton Branch then flows into Dog River..  
 Tributary stream order, if known: .

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

Tributary is:  Natural

Artificial (man-made). Explain: The wetland area on the property appears to have historically been adjacent to and drained naturally toward the southwest into Montlimar Creek; however decades ago Montlimar Creek was engineered into an approximately 200 ft. wide, 20+ ft. deep canal with a 50 ft wide maintenance access road preventing the wetland from draining to Montlimar Creek. An existing drainage ditch tributary which flows from the site toward the east appears to be a manmade excavated urban drainage conveyance that directs drainage through culverts under the interstate highway to connect with a natural but now channelized unnamed tributary shown on the USGS topographic maps conveying water to Bolton Branch.

Manipulated (man-altered). Explain: The channelized unnamed tributary east of I-65 and Bolton Branch have both been engineered over time into channelized urban stream drainage conveyances. There is variation in engineering techniques that have been used over time along the length of Bolton Branch and the UT, some segments are vegetated ditches, some are concrete bottom with vegetated banks, some are natural bottom with hardened banks (e.g. concrete retaining wall, steel sheetpile, riprap gabbion), and some segments are completely concrete lined ditches.

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

Average width: 10 feet  
 Average depth: 10 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: Banks are relatively stable, there is some evidence of bank erosion and scour from rainfall volume and flow velocities.

Presence of run/riffle/pool complexes. Explain: The tributary no longer has natural run/riffle/pool complexes because it has been almost completely channelized into a city drainage ditch system. In areas where sediment has been deposited in the bottom of hardened trapezoidal channel segments, the tributary system shows evidence of trying to re-establish meander patterns, runs, pools, point bars, vegetative cover, etc in the deposited sediment.

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): Unknown %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **11-20**

Describe flow regime: The drainage ditch tributary entering the JD site and the ditch at the south end of the JD site contained flowing water at the time of field review. Bolton Branch is a perennial drainage and does contain sufficient water volume to be actively flowing toward Dog River.

Other information on duration and volume: No other information specific to the drainage ditch tributary, such as USGS gage data, on flow volume and velocity, is available.

Surface flow is: **Confined**. Characteristics: The drainage ditch tributary was constructed in an urban setting surrounded by residential, highway, and commercial development to increase drainage of the land, receive and contain stormwater, and direct that water away from developed areas and prime future development sites to reduce potential flooding impacts.

Subsurface flow: **Unknown**. Explain findings: Not Evaluated .

Dye (or other) test performed:

Tributary has (check all that apply):

Bed and banks  
 OHWM<sup>6</sup> (check all indicators that apply):  
 clear, natural line impressed on the bank  the presence of litter and debris

<sup>5</sup> 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.

<sup>6</sup> 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.

- |   |   |
|---|---|
| <input type="checkbox"/> changes in the character of soil                   | <input type="checkbox"/> destruction of terrestrial vegetation      |
| <input checked="" type="checkbox"/> shelving                                | <input checked="" type="checkbox"/> the presence of wrack line      |
| <input checked="" type="checkbox"/> vegetation matted down, bent, or absent | <input type="checkbox"/> sediment sorting                           |
| <input checked="" type="checkbox"/> leaf litter disturbed or washed away    | <input checked="" type="checkbox"/> scour                           |
| <input checked="" type="checkbox"/> sediment deposition                     | <input type="checkbox"/> multiple observed or predicted flow events |
| <input checked="" type="checkbox"/> water staining                          | <input type="checkbox"/> abrupt change in plant community           |
| <input type="checkbox"/> other (list):                                      |   |

Discontinuous OHWM.<sup>7</sup> Explain:

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

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

**(iii) Chemical Characteristics:**

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

Explain: Water was tannic and clear such that the bottom of the channel was visible. Due to significant amounts of rainfall received between December 2009 and February 2010, there was a significant amount of trash and decaying organic debris from road right of way mowing and maintenance rafted in portions of the drainage ditch tributary.

Identify specific pollutants, if known: Due to urbanization of the area, typical pollutants include trash thrown from cars, petroleum compounds from roads and parking surface runoff, and sediment from construction activities.

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<sup>7</sup>Ibid.

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

Riparian corridor. Characteristics (type, average width): Some channel segments have relatively undeveloped forested wetland and upland buffers that are estimated to vary in width from as little as 3-5 feet per side of channel to 3 or 4 segments with buffer width in excess of 25 feet per side of channel.

Wetland fringe. Characteristics: Some channel segments along the drainage ditch tributary that are not armored or hardened have narrow freshwater wetland fringes consisting of vegetation such as Typha sp., Sagittaria sp., Ludwigia sp., and young Salix 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 tributary provides floodwater/stormwater conveyance from urban areas and provides some aquatic habitat for fishes and support of terrestrial animal species in these urban stream reaches, as evidenced by past observations of a Kingfisher capturing a small fish to feed on from the channelized Bolton Branch and Montlimar Creek tributaries north of the JD site. The tributary also conveys organic carbon and nutrients downstream to the aquatic vertebrates and invertebrates spawning and feeding in Dog River.

**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: 3.4 acres

Wetland type. Explain: Forested hardwood wetland swale, depression or remnant drainage feature that crosses property diagonally from northeast to southwest. Dominant wetland vegetation includes Magnolia virginiana, Nyssa biflora, and Woodwardia areolata. Rubus argutus, and Aralia spinosa and Cinnamomum camphora are rapidly moving into and colonizing now drained wetland areas along the outer margins of the area shown by groundwater monitoring wells to still have wetland hydrology.

Wetland quality. Explain: Wetland quality is low due to adverse hydrology effects from extensive filling of wetlands, channelizing, ditching, and re-directing of once natural streams and wetland drainages to construct roads, reduce flooding, and facilitate urban development. Reduced hydroperiod has allowed some upland species and facultative exotic species such as Ligustrum sinense and Cinnamomum camphora to colonize aggressively in the drained wetlands. The wetland shows evidence of past site clearing, organic debris disposal, or timbering activity such as tire ruts and piles of mulched or decomposing woody debris in multiple locations and small pieces of burned wood 3+ inches from the current ground surface observed in some soil cores during a 2007 review of a parcel north of this JD site.

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: Intermittent discharge of ponded water and sheet flow from rainfall runoff and possibly perennial movement of groundwater from saturated wetland soils toward the drainage ditch tributary.

Surface flow is: Overland sheetflow

Characteristics: Wetland drains to a lowest point on the south end of the property where the wetland is separated from the drainage ditch tributary by an upland berm. Some narrow, shallow channel-like areas were observed during a 2007 site visit that may allow some of the water that ponds in the wetland to flow across the berm into the the drainage ditch.

Subsurface flow: Unknown. Explain findings: Groundwater monitoring wells were installed to monitor and evaluate the duration of soil saturation on the site, however no data was collected to evaluate or determine the directionality of subsurface flow.

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: The berm/barrier separating the wetlands from the drainage ditch tributary appears to be a combination of naturally occurring upland land form (such as an upland hummock or ridge), large random mounds of apparent dirt and organic material piled throughout the site at an unknown time in the past, and historic sidecast of material from excavation of the drainage ditch into the property.

(d) Proximity (Relationship) to TNW

Project wetlands are 1-2 river miles from TNW.

Project waters are 1-2 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 was no ponded water in the wetland, however water from a roadside drainage ditch can overflow/flood into the wetland when sufficient rainfall is received.

Identify specific pollutants, if known: Due to urbanization of the area, typical pollutants include trash thrown from cars, petroleum compounds from road runoff, and sediment from any road and/or utility easement maintenance.

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

Riparian buffer. Characteristics (type, average width):

Vegetation type/percent cover. Explain: The 3.4 acre wetland area is dominated in the canopy/overstory by *Magnolia virginiana*, *Nyssa biflora*, *Acer rubrum*, and *Sapium sebiferum*, in the shrub/midstory by *Ligustrum sinense* and *Acer rubrum*, in the vine/groundcover by *Woodwardia aerolata*, *Rubus argutus*, *Vitis rotundifolia* and various *Smilax* 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, nesting and foraging habitat for small amphibians, reptiles, birds, and mammals as evidenced by 2007 observations of a recently shed snake skin in the JD area wetland, multiple observations of fresh rabbit scat in the wetlands and uplands in the JD area, and birds heard rustling tree branches.

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

All wetland(s) being considered in the cumulative analysis: 3

Approximately ( 25.0 ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
N	3.4		
Y	0.5		
Y	21.1		

Summarize overall biological, chemical and physical functions being performed: The estimated 6 acres of wetlands along this tributary include th 3.4 acres of hardwood forested wetland in the JD area, freshwater fringe along small segments of the drainage (approximately 0.5 acre), and an estimated 21.1 acres of mixed pine, scrub-shrub, and hardwood forested wetlands upstream and downstream of the JD area. This combination of wetland systems along the man-made drainage ditch tributary and channelized UT to Bolton Branch provides a water source/water recharge to the tributaries and Bolton Branch, retention of stormwater/floodwater from developed urban areas, and initial treatment and removal of pollutants from urban road runoff prior to stormwater entering the tributary. Detritus and decomposition of organic matter from the wetlands also provides nutrients and organic carbon to the tributary for use by wildlife and fish in downstream food chains. These areas also provide natural lands in a highly developed, paved and urbanized area where wildlife may rest, forage, and seek refuge from predators.

### 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: The wetland and RPW receive and convey runoff and floodwater from streets and adjacent lands to the TNW, Dog River. The wetland areas provide 1) buffering along the RPW to reduce direct discharge of petroleum and other chemicals from roadways into open waters and to provide shading of the RPW helping prevent/reduce the increase of water temperature in the tributary 2) pollutant filtration and sediment retention for stormwater/floodwater entering the RPW. The detritus and decomposition of organic material from the wetlands also provides a source of organic carbon and nutrients to the downstream foodchain that includes benthic invertebrates, fishes, crabs, birds, small mammals and eventually humans from fish and shellfish caught and consumed from Dog River and Mobile Bay. 3) a water retention and recharge source for the tributary, Bolton Branch, and Dog River 4) spawning, forage, and refuge area for frogs and resting, foraging, and refuge areas for wildlife such as songbirds, wading birds, small mammals such as rabbits and racoons, reptiles such as turtles and snakes.

**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<sup>8</sup> 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: 3.4 acres.

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

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

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

**7. Impoundments of jurisdictional waters.<sup>9</sup>**

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

<sup>8</sup>See Footnote # 3.

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

- 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):<sup>10</sup>**

- 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.  
 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 Mobile, AL.

<sup>10</sup> 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.

- USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey, Mobile County, Alabama. Available online at <http://websoilsurvey.nrcs.usda.gov/> accessed [02/24/2010] .
- National wetlands inventory map(s). Cite name:
- State/Local wetland inventory map(s):
- FEMA/FIRM maps: Mobile County, Alabama and Incorporated Areas, Map No. 01097C0563K effective March 17, 2010.
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date):  
or  Other (Name & Date): Color digital photos taken by project manager during site inspection 10 February 2010 and color digital photographs submitted by project agent, Barry A. Vittor and Associates with JD request.
- Previous determination(s). File no. and date of response letter: ALJ96-04364-K dated 13 December 1996, SAM-2007-775-LET associated with NWP 39 dated 12 July 2007 for 6.5 acre parcel adjacent to the north.
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify): One year of groundwater well array (12 wells) monitoring data collected between February 2008 and February 2009 to evaluate location of groundwater table and duration of soil saturation in apparent wetlands located on 18.8 acre parcel.

**B. ADDITIONAL COMMENTS TO SUPPORT JD:**