

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):** January 5, 2018.
- B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** SWL, Deltic Timber Corporation – Phases 30 and 31 Property, SWL-2017-00276. The review area for this AJD includes the property boundaries of approximately 122 acres.
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:**
State: Arkansas County/parish/borough: Pulaski County City: Little Rock
Center coordinates of site (lat/long in degree decimal format): Lat. 34.78923°, Long. -92.44960°
Universal Transverse Mercator: 3849807.9, 550353.6
Name of nearest waterbody: Unnamed Tributary to Little Maumelle River (TNW).
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Little Maumelle River, Arkansas.
Name of watershed or Hydrologic Unit Code (HUC): 11110207, Lower Arkansas-Maumelle. Arkansas.
- ☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
- ☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form
- D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**
- ☒ Office (Desk) Determination. Date: October 19, 2017
- ☒ Field Determination. Date(s): November 15, 2017

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:

- S-1: Ephemeral, 542 linear feet, 4.3 width (ft),
S-2: Intermittent, 3142 linear feet, 8.4 width (ft),
S-3: Ephemeral, 604 linear feet, 4.7 width (ft),
S-4: Ephemeral, 1966 linear feet, 2.9 width (ft),
S-5: Ephemeral, 669 linear feet, 1.4 width (ft),
S-6: Ephemeral, 609 linear feet, 1.0 width (ft),
S-7: Ephemeral, 109 linear feet, 2.8 width (ft).

Wetlands: W-1, 0.76 acres.

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).

c. Limits (boundaries) of jurisdiction based on: Established by OHWM

Elevation of established OHWM (if known):

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

- ☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: An approximately 200-linear-foot swale located immediately off the northeast corner of the property in an existing subdivision conveys stormwater from S-5 (ephemeral) and connects it to the remaining portion of S-5 that eventually connects to the Little Maumelle River (TNW) and then into the Arkansas River (TNW) (refer to sheet 2 of 9). This swale was created when the subdivision was built to re-route the ephemeral stream from its original course. Although not a regulated water itself, the swale connects flow from one jurisdictional water to another.

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: 1,127 square miles

Drainage area: 13,469 acres

Average annual rainfall: 49 inches

Average annual snowfall: 5 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

³ Supporting documentation is presented in Section III.F.

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

- Tributary (S-1), Ephemeral) flows through 3 tributaries before entering TNW.
 Tributary (S- 2), Intermittent) flows through 3 tributaries before entering TNW
 Tributary (S- 3), Ephemeral) flows through 4 tributaries before entering TNW
☒ Tributary (S- 4), Ephemeral) flows through 4 tributaries before entering TNW
 Tributary (S- 5), Ephemeral) flows through 3 tributaries before entering TNW
 Tributary (S- 6), Ephemeral) flows through 3 tributaries before entering TNW
 Tributary (S- 7), Ephemeral) flows through 4 tributaries before entering TNW.

Project waters are 2-5 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: No, project waters are located in Central Arkansas entirely within Little Rock, Pulaski County, Arkansas.

Identify flow route to TNW⁵: S-1, S-2, and S-5 flow into three unnamed tributaries to the Little Maumelle River (TNW), then into the Arkansas River (TNW). S-3, S-4, and S-6 flow into S-2 and then three unnamed tributaries to the Little Maumelle River (TNW), then into the Arkansas River (TNW). S-7 flows into S-1 and then three unnamed tributaries to the Little Maumelle River (TNW), then into the Arkansas River (TNW) (refer to sheet 3 of 9).

Tributary stream order, if known: All streams are first order streams.

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

- Tributary is:** ☒ Natural: Streams S-1 through S-7 are natural within the project area.
☐ Artificial (man-made). Explain:
☐ Manipulated (man-altered).

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

STREAM	OHHW (ft)	OHWD (ft)	Length (ft)
S-1	4.3	0.4	542
S-2	8.4	0.7	3142
S-3	4.7	0.5	604
S-4	2.9	0.2	1966
S-5	1.4	0.2	669
S-6	1.0	0.2	609
S-7	2.8	0.8	109

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: All streams seem relatively stable but can flood out of banks during storm events.

Presence of run/riffle/pool complexes. Explain: Pooled areas during low flow in the intermittent stream (S-2) during low flow, and in the ephemeral streams (S-1, S-3 through S-7) during little or no flow.

Tributary geometry: Meandering

Tributary gradient (approximate average slope): 5%

(c) Flow:

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.

Streams S-1, S-3 through S-7 provide for ephemeral flow. Stream S-2 Provides for intermittent flow.

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

Describe flow regime: Due to upper headwater of drainage and upstream topography, S-1, S-3 through S-7, ephemeral, flow is from urban rainfall runoff primarily. S-2, intermittent, flows from groundwater and urban rainfall runoff.

Other information on duration and volume: S-1, S-3 through S-7 flows occur during and following storm events. S-2 flows during most of the year.

Subsurface flow: Unknown Explain findings:

☐ Dye (or other) test performed:

Tributary has (check all that apply): All streams.

☒ 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):

(iii) Chemical Characteristics:

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

Explain: Typical of urban runoff that enters a forested area, being slightly discolored from sediment.

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

☒ Riparian corridor. Characteristics (type, average width): forested, the entire project area is currently forested.

☐ Wetland fringe. Characteristics:

☒ Habitat for:

☐ Federally Listed species. Explain findings:

☒ Fish/spawn areas. Explain findings: The intermittent stream (S-2) provides for small fish habitat and spawning areas.

☐ Other environmentally-sensitive species. Explain findings:

☒ Aquatic/wildlife diversity. Explain findings: All ephemeral streams provide limited habitat for amphibians and reptiles and micro-organisms. The intermittent stream provides habitat for small fish, amphibians, reptiles and micro-organisms.

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: W-1 is approximately 0.76 acres in size. Wetland type: W-1 is a forested wetland.

Wetland quality. Explain: W-1 is fair in quality. With its connection to streams S-2 and S-4 the wetland exhibits adequate hydrology to support a variety of vegetation however this same hydrology also results in stunted and stressed plants during portions of the year.

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

⁷Ibid.

Project wetlands cross or serve as state boundaries. Explain: No, project waters are located in Central Arkansas entirely within Little Rock, Pulaski County, Arkansas..

(b) General Flow Relationship with Non-TNW:

Flow is: Intermittent Flow Explain: Stream S-2 connects to W-1 providing intermittent flow from the wetland,

Surface flow is: Discrete and Confined

Characteristics: Stream S-2 flows into Wetland W-1 and then flows out of W-1 back into S-2 .

Subsurface flow: Unknown Explain findings:

☐ Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

☒ Directly abutting for streams S-2 and S-4.

☐ Not directly abutting for streams.

☒ Discrete wetland hydrologic connection. Explain: Streams S-2 and S-4 flow directly into wetland W-1.

☐ Ecological connection. Explain:

☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are less than 2 -5 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: Wetland W-1 water is typical of a wetland that receives urban and forested area runoff, being slightly discolored from stormwater and sediment deposition.

Identify specific pollutants, if known:

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

☒ Riparian buffer. Characteristics (type, average width): Forested, greater than 500 linear feet.

☒ Vegetation type/percent cover. Explain: The dominant vegetation in the wetland consists of black willow (*Salix nigra*), American sweetgum (*Liquidambar styraciflua*), black raspberry (*Rubus occidentalis*), salt bush (*Baccharis halimifolia*), and soft rush (*Juncus effusus*).

☒ Habitat for:

☐ Federally Listed species. Explain findings:

☒ Fish/spawn areas. Explain findings: Water depth limits fish spawning to smaller fish species as well as their life cycles.

☐ Other environmentally-sensitive species. Explain findings:

☒ Aquatic/wildlife diversity. Explain findings: Provides limited habitat for small fish, amphibians, reptiles, and micro-organisms.

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

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

Approximately 0.76 acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)

W-1 *Yes

Size (in acres)

0.76

Directly abuts? (Y/N)

Size (in acres)

***directly abuts streams S-2 and S-4.**

Summarize overall biological, chemical and physical functions being performed: W-1 provides wildlife habitat and refugia for aquatic life, transportation of storm water runoff, and cycling nutrients and organic matter within the watershed.

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: Streams S-1, S-3, and S-5 through S-7 are ephemeral and following storm events convey water to the north of the property. S-1 and S-5 flows into three unnamed tributaries to the Little Maumelle River (TNW) and then into the Arkansas River (TNW). S-6 flows into S-2 (intermittent stream) and then into three unnamed tributaries to the Little Maumelle River (TNW) and then into the Arkansas River (TNW). S-3 and S-7 flow into three unnamed tributaries to the Little Maumelle River (TNW) and then into the Arkansas River (TNW). **NOTE for S-5 and S-6: Although out of the review area, an approximately 200-linear-foot swale located in the existing subdivision immediately off the northeast corner of the property conveys stormwater from S-5 and connects it to the remaining portion of S-5, which connects to the Little Maumelle River (TNW) and into the Arkansas River (TNW). This swale was created when the subdivision was built to re-route the ephemeral stream from its original course. Although not a regulated water itself, the swale connects flow from S-5 (jurisdictional water) to its original self and therefore does not sever the jurisdiction of S-5. S-6 flows through the stormwater system of the same subdivision where it connects to S-2 (intermittent stream). Although not a regulated water itself, the subdivisions stormwater system connects flow from S-6 to its original self and therefore does not sever the jurisdiction of S-6.** All streams provide limited aquatic habitat due to their ephemeral nature except in pooled areas where they provide minimal and temporary aquatic habitat following storm events for reptiles and amphibians, as well as macro- and micro-invertebrates.
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: Stream S-4 is an ephemeral stream, that during and following storm events, conveys water into W-1 and then into S-2 (intermittent) where it then flows into three unnamed tributaries to the Little Maumelle River (TNW) and then into the Arkansas River (TNW). Stream S-4 provides limited aquatic habitat due to its ephemeral nature, except in pooled areas, where it provides minimal and temporary aquatic habitat following storm events for reptiles and amphibians, as well as macro- and micro-invertebrates.
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: National Hydrography Dataset (NHD) indicates that this stream is intermittent with only seasonal flow.

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

- ☒ Tributary waters: S-2 is 3,142 linear feet in length and averages 8.4 linear feet in width.
 - ☐ Other non-wetland waters: acres.
- Identify type(s) of waters:

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

⁸See Footnote # 3.

- ☒ 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: S-1 is 542 linear feet in length and averages 4.3 linear feet in width. S-3 is 604 linear feet in length and averages 4.7 linear feet in width. S-4 is 1,966 linear feet in length and averages 2.9 linear feet in width. S-5 is 669 linear feet in length and averages 1.4 linear feet in width. S-6 is 609 linear feet in length and averages 1.0 linear feet in width. S-7 is 109 linear feet in length and averages 2.8 linear feet in width.
- ☐ 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: S-2 flows directly through W-1 and is not separated by any uplands, berms, dikes, or levees from W-1.

Provide acreage estimates for jurisdictional wetlands in the review area: 0.76 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: 0.76 acres.

7. Impoundments of jurisdictional waters.⁹

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

- ☐ Demonstrate that impoundment was created from “waters of the U.S.,”)
- ☐ 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.

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.

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):

See II.B.2.

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:

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: GBMc & Associates, Jurisdictional Determination, dated August 15, 2017.
- ☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant: GBMc & Associates, Jurisdictional Determination, dated August 15, 2017.
 - ☒ 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: 11110207, Lower Arkansas-Maumelle. Arkansas.
 - ☒ USGS NHD data.
 - ☒ USGS 8 and 12 digit HUC maps.
- ☒ U.S. Geological Survey map(s). Cite scale & quad name: 24K, AR-PINNACLE MOUNTAIN
- ☐ USDA Natural Resources Conservation Service Soil Survey. Citation:
- ☐ National wetlands inventory map(s). Cite name:
- ☐ State/Local wetland inventory map(s):
- ☐ FEMA/FIRM maps: Map Number:
- ☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- ☒ Photographs: ☒ Aerial (Name & Date): GBMc & Associates, Jurisdictional Determination, dated August 15, 2017.
 - ☐ or ☒ Other (Name & Date): GBMc & Associates, Jurisdictional Determination, dated August 15, 2017.
- ☒ Previous determination(s). File no. and date of response letter: PJD for File No.2009-00435, The Gardens at Valley Falls, 10/26/2009.
- ☐ Applicable/supporting case law:
- ☐ Applicable/supporting scientific literature:
- ☐ Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: The review area for this approved jurisdictional determination consists of approximately 122 acres of moderately steep forested property located in a highly developed area. Streams S-1, and S-3 through S-7 are

SWL, Deltic Timber Corporation – Phases 30 and 31 Property, SWL-2017-00276.

ephemeral streams that are jurisdictional and have a significant nexus to a TNW due to the following characteristics: defined banks, scour, disturbance of leaf litter, etc. as well as a defined OHWM; ability to transmit chemicals and nutrients to a TNW; and their ability to provide limited biological habitat that provides some, although limited, nutrients to the biological resources of the Little Maumelle River (TNW) and the Arkansas River (TNW), which provide significant habitat for fish and wildlife species. The intermittent stream (S-2) is currently serving a variety of functions, such as providing seasonal wildlife habitat and refugia for aquatic life, transporting storm water runoff, and cycling nutrients and organic matter within the watershed. The only wetland on the site (W-1) has a hydrological connection with streams S-2, S-3, and S-4. The wetland serves as a floodwater retention basin, nutrient and pollution (chemical) sink from flows in S-2, S-3, and S-4, and provides habitat for small aquatic species such as amphibians, reptiles, and micro- and macroinvertebrates. The wetland then provides nutrients and biological resources that enhance the aquatic food chain downstream through S-2 to the Little Maumelle (TNW) and the Arkansas River (TNW).