



**U.S. ARMY CORPS OF ENGINEERS  
REGULATORY PROGRAM  
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)  
NAVIGABLE WATERS PROTECTION RULE**

**I. ADMINISTRATIVE INFORMATION**

Completion Date of Approved Jurisdictional Determination (AJD): 3/29/2021

ORM Number: SWL-2017-00276-2

Associated JDs: N/A

Review Area Location<sup>1</sup>: State/Territory: Arkansas City: Little Rock County/Parish/Borough: Pulaski

Center Coordinates of Review Area: Latitude 34.789640° Longitude -92.449630°

**II. FINDINGS**

**A. Summary:** Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.

- The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A
- There are “navigable waters of the United States” within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- There are “waters of the United States” within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

**B. Rivers and Harbors Act of 1899 Section 10 (§ 10)<sup>2</sup>**

| § 10 Name | § 10 Size | § 10 Criteria | Rationale for § 10 Determination |
|-----------|-----------|---------------|----------------------------------|
| N/A.      | N/A.      | N/A.          | N/A.                             |

**C. Clean Water Act Section 404**

| Territorial Seas and Traditional Navigable Waters ((a)(1) waters): <sup>3</sup> |             |                 |                                    |
|---|-------------|-----------------|------------------------------------|
| (a)(1) Name   | (a)(1) Size | (a)(1) Criteria | Rationale for (a)(1) Determination |
| N/A.  | N/A.        | N/A.            | N/A.                               |

| Tributaries ((a)(2) waters): |                         |   |  |
|------------------------------|-------------------------|---|--|
| (a)(2) Name                  | (a)(2) Size             | (a)(2) Criteria   | Rationale for (a)(2) Determination   |
| S-2                          | 3,142<br>linear<br>feet | (a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. | Based on the analysis in GBMc & Associates’ (GBMc) 2/22/2017 delineation, observations from USACE’s 11/15/17 field review, evidence in maps and aerial photographs of the area, and spatial data from various other sources (see III. Supporting Information), S-2 is a 3,142-foot-long section of an intermittent stream that flows with groundwater most of the year but also receives surface flow water from urban rainfall runoff. The stream has an estimated average width of 8.4 feet and an estimated average depth of 0.7 feet and provides wildlife habitat and |

<sup>1</sup> Map(s)/figure(s) are attached to the AJD provided to the requestor.

<sup>2</sup> If the navigable water is not subject to the ebb and flow of the tide or included on the District’s list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

<sup>3</sup> A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.



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| Tributaries ((a)(2) waters): |             |                 |  |
|------------------------------|-------------|-----------------|--|
| (a)(2) Name                  | (a)(2) Size | (a)(2) Criteria | Rationale for (a)(2) Determination   |
|                              |             |                 | <p>refugia for aquatic life, transports storm water runoff, and cycles nutrients and organic matter within the watershed. Dominant substrate includes gravel and cobbles.</p> <p>S-2 is an unnamed intermittent tributary indirectly contributing surface flow to the Little Maumelle River (located approximately 2,300 meters downstream) through other intermittent tributaries. Thus, S-2 is a jurisdictional tributary as defined under 33 CFR 328.3(a)(2) and 33 CFR 328.3(c)(12).</p> |

| Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters): |             |                 |                                    |
|---|-------------|-----------------|------------------------------------|
| (a)(3) Name   | (a)(3) Size | (a)(3) Criteria | Rationale for (a)(3) Determination |
| N/A.  | N/A.        | N/A.            | N/A.                               |

| Adjacent wetlands ((a)(4) waters): |             |                 |   |
|------------------------------------|-------------|-----------------|---|
| (a)(4) Name                        | (a)(4) Size | (a)(4) Criteria | Rationale for (a)(4) Determination  |
| W-1                                | 0.76        | acre(s)         | <p>(a)(4) Wetland abuts an (a)(1)-(a)(3) water.</p> <p>Based on the analysis in GBMc's 2/22/2017 delineation, observations from USACE's 11/15/17 field review, evidence in maps and aerial photographs of the area, and spatial data from various other sources (see III. Supporting Information), W-1 is man-made forested wetland that was created as a detention facility over twenty years ago. Although W-1's ability to function as a forested wetland is partially impaired due to its man-made impoundment and because it drains to a culvert, it provides at least some wildlife habitat and refugia for aquatic life, transportation of storm water runoff, and cycles some nutrients and organic matter within the watershed.</p> <p>Both S-2 and S-4 flow into W-1. Water drains from W-1 into intermittent stream S-2 (an (a)(2) water) which flows into other intermittent tributaries before finally discharging into the Little Maumelle River. Thus, W-1 is an adjacent wetland as defined under 33 CFR 328.3(a)(4) and 33 CFR 328.3(c)(1)(i).</p> |

**D. Excluded Waters or Features**



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| Excluded waters ((b)(1) – (b)(12)): <sup>4</sup> |                |             |   |   |
|--|----------------|-------------|---|---|
| Exclusion Name                                   | Exclusion Size |             | Exclusion <sup>5</sup>  | Rationale for Exclusion Determination   |
| S-1  | 542            | linear feet | (b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool. | <p>Based on the analysis in GBMc's 2/22/2017 delineation, observations from USACE's 11/15/17 field review, evidence in maps and aerial photographs of the area, and spatial data from various other sources (see III. Supporting Information), S-1 is a 542-foot-long section of an ephemeral stream with an average width of 4.3 feet and an average depth of 0.4 feet. Water flow through S-1 is primarily from storm water runoff. S-1 provides only limited habitat for amphibians, reptiles, and micro-organisms. S-1 flows into S-2.</p> <p>Although S-1 exhibits defined banks, scour, disturbance of leaf litter, and a defined OHWM, it only carries water in direct response to precipitation. Thus, S-1 is an ephemeral stream and is excluded from protection by the Navigable Waters Protection Rule (NWPR) under 33 CFR 328.3(b)(3).</p>  |
| S-3  | 604            | linear feet | (b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool. | <p>Based on the analysis in GBMc's 2/22/2017 delineation, observations from USACE's 11/15/17 field review, evidence in maps and aerial photographs of the area, and spatial data from various other sources (see III. Supporting Information), S-3 is a 604-foot-long section of an ephemeral stream with an average width of 4.7 feet and an average depth of 0.5 feet. As with the other ephemeral streams identified within the review area, water flow through S-3 is primarily from storm water runoff and S-3 provides only limited habitat for amphibians, reptiles, and micro-organisms. S-3 flows into S-2.</p> <p>Although S-3 exhibits defined banks, scour, disturbance of leaf litter, and a defined OHWM, it only carries water in direct response to precipitation. Thus, S-3 is an ephemeral stream and is excluded from protection by the NWPR under 33 CFR 328.3(b)(3).</p> |
| S-4  | 1,966          | linear feet | (b)(3) Ephemeral feature, including an ephemeral                                      | Based on the analysis in GBMc's 2/22/2017 delineation, observations from USACE's 11/15/17 field review, evidence in maps and  |

<sup>4</sup> Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

<sup>5</sup> Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.



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| Excluded waters ((b)(1) – (b)(12)): <sup>4</sup> |                |                                      |   |
|--|----------------|--------------------------------------|---|
| Exclusion Name                                   | Exclusion Size | Exclusion <sup>5</sup>               | Rationale for Exclusion Determination   |
|  |                | stream, swale, gully, rill, or pool. | <p>aerial photographs of the area, and spatial data from various other sources (see III. Supporting Information), S-4 is a 1,966-foot-long section of an ephemeral stream with an average width of 2.9 feet and an average depth of 0.2 feet. As with the other ephemeral streams identified within the review area, water flow through S-4 is primarily from storm water runoff and S-4 provides only limited habitat for amphibians, reptiles, and micro-organisms. S-4 flows into S-1</p> <p>Although S-4 exhibits defined banks, scour, disturbance of leaf litter, and a defined OHWM, it only carries water in direct response to precipitation. Thus, S-4 is an ephemeral stream and is excluded from protection by the NWPR under 33 CFR 328.3(b)(3).</p>   |
| S-5  | 669            | linear feet                          | <p>(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.</p> <p>Based on the analysis in GBMc's 2/22/2017 delineation, observations from USACE's 11/15/17 field review, evidence in maps and aerial photographs of the area, and spatial data from various other sources (see III. Supporting Information), S-5 is a 669-foot-long section of an ephemeral stream with an average width of 1.4 feet and an average depth of 0.2 feet. As with the other ephemeral streams identified within the review area, water flow through S-5 is primarily from storm water runoff and S-5 provides only limited habitat for amphibians, reptiles, and micro-organisms. S-5 loses ordinary high water mark features as it exits the project property in the northeast corner. At the property boundary, the stream flows into the yard of a residence and appears to continue as overland flow in no defined channel.</p> <p>Although S-5 exhibits defined banks, scour, disturbance of leaf litter, and a defined OHWM within the review area, it only carries water in direct response to precipitation. Thus, S-5 is an ephemeral stream and is excluded from protection by the NWPR under 33 CFR 328.3(b)(3).</p> |
| S-6  | 609            | linear feet                          | <p>(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.</p> <p>Based on the analysis in GBMc's 2/22/2017 delineation, observations from USACE's 11/15/17 field review, evidence in maps and aerial photographs of the area, and spatial data from various other sources (see III. Supporting</p>   |



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| Excluded waters ((b)(1) – (b)(12)): <sup>4</sup> |                |                        |   |
|--|----------------|------------------------|---|
| Exclusion Name                                   | Exclusion Size | Exclusion <sup>5</sup> | Rationale for Exclusion Determination   |
|  |                |                        | <p>Information), S-6 is a 609-foot-long section of an ephemeral stream with an average width of 1.0 feet and an average depth of 0.2 feet. As with the other ephemeral streams identified within the review area, water flow through S-6 is primarily from storm water runoff and S-6 provides only limited habitat for amphibians, reptiles, and micro-organisms. S-6 flows north to the boundary of the subdivision and enters the adjacent residential development's storm water drainage system through a small culvert. The drainage system exits the subdivision approximately 1,000 feet north of this culvert.</p> <p>Although S-6 exhibits defined banks, scour, disturbance of leaf litter, and a defined OHWM within the review area, it only carries water in direct response to precipitation. Thus, S-6 is an ephemeral stream and is excluded from protection by the NWPR under 33 CFR 328.3(b)(3).</p>  |
| S-7  | 109            | linear feet            | <p>(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.</p> <p>Based on the analysis in GBMc's 2/22/2017 delineation, observations from USACE's 11/15/17 field review, evidence in maps and aerial photographs of the area, and spatial data from various other sources (see III. Supporting Information), S-7 is a 109-foot-long section of an ephemeral stream with an average width of 2.8 feet and an average depth of 0.8 feet. As with the other ephemeral streams identified within the review area, water flow through S-7 is primarily from storm water runoff and S-7 provides only limited habitat for amphibians, reptiles, and micro-organisms. S-7 flows into S-1.</p> <p>Although S-7 exhibits defined banks, scour, disturbance of leaf litter, and a defined OHWM, it only carries water in direct response to precipitation. Thus, S-7 is an ephemeral stream and is excluded from protection by the Navigable Waters Protection Rule (NWPR) under 33 CFR 328.3(b)(3).</p> |

**III. SUPPORTING INFORMATION**

**A. Select/enter all resources** that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.



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Information submitted by, or on behalf of, the applicant/consultant: [Jurisdictional Delineation for Chenal Valley Phases 30 and 31 Property – Little Rock, Arkansas by GBMc and dated 8/15/2017](#); [Chenal Valley Phases 30 & 31 – Little Rock, AR Request for an Approved Jurisdictional Delineation by GBMc on behalf of the applicant \(Dave Meghreblian, PotlatchDeltic Timber Corporation\) and dated June 22, 2020.](#)

This information is sufficient for purposes of this AJD.

Rationale: [N/A](#)

Data sheets prepared by the Corps: [Title\(s\) and/or date\(s\).](#)

Photographs: [Aerial and Other: Site Photos in Delineation Report by GBMc; Google Earth Imagery \(all images available in the historical imagery feature between 1985 and 2018\); Global Enhanced GEOINT Delivery Imagery \(all images available between 5/8/2017 and 2/19/2021 at Zoom Level 17\); HistoricAerials.com \(images from 1955, 1960, and 1970\)](#)

Corps site visit(s) conducted on: [11/15/2017](#)

Previous Jurisdictional Determinations (AJDs or PJDs): [AJD under SWL-2017-00276-1 dated 1/5/2018](#)

Antecedent Precipitation Tool: [provide detailed discussion in Section III.B.](#)

USDA NRCS Soil Survey: [NRCS Web Soil Survey 3.3.2, accessed online for the project area on August 6, 2020](#)

USFWS NWI maps: [USFWS Wetlands Mapper, accessed online for the project area on August 6, 2020](#)

USGS topographic maps: [USGS 7.5 min. topographic quadrangles: Pinnacle Mountain, Arkansas \(1946, 1957, 1962, 1967, 1971, 1976, 1986, 2000, 2011, 2014, 2017, and 2020 editions\)](#)

**Other data sources used to aid in this determination:**

| Data Source (select)            | Name and/or date and other relevant information  |
|---------------------------------|--|
| <a href="#">USGS Sources</a>    | <a href="#">USGS The National Map – National Hydrography Dataset</a>   |
| <a href="#">USDA Sources</a>    | <a href="#">NRCS Web Soil Survey 3.3.2 – Map Unit Descriptions for Tiak fine sandy loam</a>  |
| <a href="#">NOAA Sources</a>    | <a href="#">N/A.</a>   |
| <a href="#">USACE Sources</a>   | <a href="#">USACE ArcMap data; Antecedent Precipitation Tool (APT)</a>   |
| <a href="#">LiDAR data/maps</a> | <a href="#">USGS The National Map – 3DEP LiDAR data</a>  |
| <a href="#">Other Sources</a>   | <a href="#">FEMA National Flood Hazard Layer Viewer; USFWS National Wetland Inventory Map; USACE 1987 manual and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0) (USACE Engineer Research and Development Center 2012).</a> |

**B. Typical year assessment(s):** [Dates for the delineation conducted by GBMc \(2/22/17\) and USACE’s field review \(11/15/17\) were entered into USACE’s Antecedent Precipitation Tool \(APT\) to determine if, at the time of the field investigations, precipitation conditions were typical, or within the normal precipitation range for the project vicinity over the preceding 30 years. Both field investigations were conducted during the wet season according to the WebWIMP H2O Balance.](#)

[On 2/22/17, according to the APT and given the rolling 30-day total figured for the day of delineation, precipitation conditions were wetter than normal \(final Antecedent Condition Calculation of 17\). In other words, on average over the previous 30 years, over 70-percent of the time the monthly precipitation amounts between 1/22 and 2/22 were less than that observed between 1/22/17 and 2/22/17, suggesting the month between 1/22/17 and 2/22/17 was wetter than normal. The PDSI Drought Index indicates,](#)





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however, that the region was in a moderate drought. Additionally, the actual rainfall documented at nearby weather stations on 2/22/17 was well below the 30th percentile of the 30-year normal range. GBMc recorded that the weather conditions on 2/22/17 were sunny and mild but that 1.47-inches of rainfall were recorded for the two previous days. The wetter than normal conditions, the recent precipitation event, and the fact that the field delineation was conducted during the wet season, likely account for the level of water present in the ephemeral stream channels.

Precipitation conditions were drier than normal (final Antecedent Condition Calculation of 7) for the USACE field review on 11/15/17.

- C. Additional comments to support AJD:** According to GBMc's 2/22/2017 aquatic resources delineation of the project property, there are seven streams (S-1 through S-7) and one wetland (W-1) within the property boundaries. GBMc classified streams S-1 and S-3 through S-7 as ephemeral and S-2 as intermittent but provided minimal supporting data to justify the classification. W-1 was identified as a forested wetland intentionally created over 20 years ago to serve as a storm water detention facility for adjacent developments to the west. The culvert that connects W-1 to S-2 is also an indication that this was a constructed detention facility. In the AJD request letter, GBMc indicated that, because the streams are ephemeral and the wetlands are connected only to the ephemeral streams, there are no jurisdictional aquatic resources, as defined in the 2020 Navigable Waters Protection Rule (NWPR), on the property.

USACE's 11/15/2017 field review and data source reviews did not identify any evidence that would contradict GBMc's delineation and classification of aquatic resources documented in the delineation report, except that S-1 does not flow into S-2. W-1 exhibits the hydrology, vegetation, and soil indicators documented in GBMc's delineation that are necessary for classification as forested wetlands. Additionally, because W-1 abuts intermittent stream S-2 it is considered an Adjacent Wetland under 33 CFR 328.3(c)(1)(i) of the NWPR.

The six ephemeral streams exhibit defined banks, scour, disturbance of leaf litter, and defined OHWMs flow with water only in direct response to precipitation. Water flow through S-1 and S-3 through S-7 is primarily from storm water runoff. The ephemeral streams provide only limited habitat for amphibians, reptiles, and micro-organisms. S-1 flows into residential development to the south of the project property and west of S-2. S-3 and S-4 flow into S-2 at W-1. S-2 is an unnamed intermittent tributary indirectly flowing to the Little Maumelle River through approximately 2,300 meters of intermittent stream channel.

Based on GBMc's delineation, observations from USACE's 11/15/2017 field inspection, evidence in maps and aerial photographs of the area, and spatial data from various other sources (see III. Supporting Information), USACE has determined that S-2 and W-1 are jurisdictional waters and S-1 and S-3 through S-7 are not jurisdictional waters as defined in the NWPR.

This jurisdictional determination is specific to an approximately 122-acre property located in the West Little Rock area of Little Rock, Pulaski County, Arkansas. The property is east of La Marche Drive, south of Hanna Lane, and west of Forest Dale Drive in Little Rock. The project property is mapped on the Pinnacle Mountain, Arkansas U.S. Geological Survey (USGS) 7.5 minute topographic quadrangle and the legal description is SE ¼ of Section 24 and the NE ¼ of section 25, T. 2 N., R. 14 W. Coordinates of the approximate property center are 34.789640° N, -92.449630° W. The property is located in the Lower Arkansas-Maumelle watershed ([HUC] 11110207), a watershed of approximately 1126.78 square miles.



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The review area contains six non-jurisdictional ephemeral streams, one jurisdictional ephemeral stream, and one non-jurisdictional wetland.

PREPARED BY:

DATE: March 29, 2021

James Beers  
Archaeologist & Regulatory Project Manager