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): 9/30/2020
ORM Number: LRH-2020-722-MUS; South Fork Buffalo Creek
Associated JDs: N/A
Review Area Location[1]: State/Territory: OH City: Sarahsville County/Parish/Borough: Noble
Center Coordinates of Review Area: Latitude 39.823447 Longitude -81.426839

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)[2]

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

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters):[3]				
(a)(1) Name	(a)(1) Size		(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):within the AJD Boundary				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
UNT's Little Buffalo Creek and S.F. Buffalo Creek (Streams 1-2,6,10, 14, 15, 23, 40, 42, 45, 47, 48 64, 68, 82)	5713 513	linear feetlinear feet	(a)(2) Intermittent tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year. (a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a) (1) water in a typical year	The streams are direct tributaries to Little Buffalo Creek and South Fork Buffalo Creek, which flow into Wills Creek, a perennial tributary of the Muskingum River, a navigable water of the U.S. Refer to the enclosed map entitled "Jurisdictional Determination Map – Little Buffalo Area – B&N Coal, Inc.". These streams were observed with intermittent flow during the

[1] Map(s)/figure(s) are attached to the AJD provided to the requestor.
[2] 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.
[3] 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.

Tributaries ((a)(2) waters):within the AJD Boundary				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
				September 2020 site investigation. See Table 1 for AJD waters.

Tributaries ((a)(2) waters):within the AJD Boundary				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
UNT South Fork Little Buffalo Creek (Streams 11 and 93)	513	linear feet	(a)(2) Perennial tributary contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	The streams are tributaries of South Fork Buffalo Creek, which flow into Wills Creek, a perennial tributary of the Muskingum River, a navigable water of the U.S. Refer to the enclosed map entitled "Jurisdictional Determination Map – Little Buffalo Area – B&N Coal, Inc.". The streams were observed with perennial flow during the September 2020 site visit. See Table 1 for AJD waters.

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
EWI-1	0.58	acre(s)	(a)(3) Lake/pond or impoundment of a jurisdictional water contributes surface water flow directly or indirectly to an (a)(1) water in a typical year.	EWI-1 is an impoundment of Stream 6, an intermittent tributary and of South Fork Buffalo Creek. See Table 1 for AJD waters.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
Wetland A, G, H, Z	0.092	acre(s)	(a)(4) Wetland abuts an (a)(1)-(a)(3) water.	These wetlands were found the meet the three criteria for a jurisdictional wetland and are located directly abutting intermittent tributaries of South Fork Buffalo Creek.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)):[4] within the AJD boundary.				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
UNT of South Fork Little Buffalo Creek and Little Buffalo Creek (Streams 6-9, 15-16, 19, 23, 28-31, 35, 37-51, 53, 55-57, 59, 61, 64-75, 77, 82. 84.86. 92)	8823	linear feet	(b)(3) Ephemeral feature, including an ephemeral stream, swale, gully, rill, or pool.	These channels only provide ephemeral flow, are narrow and shallow, and have channel beds that have significant amounts of leaf litter and debris which is indicative of low flow for short durations. These channels do not present any evidence of physical or biological indicators of intermittent flow. No channel flow was observed during the September 2020 site investigation. See Section B for additional information and Table 2 for non-jurisdictional waters.

Excluded waters ((b)(1) – (b)(12)):[6] within the AJD boundary.				
Exclusion Name	Exclusion Size		Exclusion[7]	Rationale for Exclusion Determination
Wetlands B-F, K, M-N, Q, U-Y, XX, and XZ)	0.667	acre(s)	(b)(1) Non-adjacent wetland.	These wetlands do not abut an (a)1, a(2), or a(3) water nor are they inundated by these areas in a typical year. The is no direct hydrologic surface connection between these wetlands the (a)1, (a)2, or a(3) water via flooding, culvert, or other artificial feature. See Section B for additional information and Table 2 for non-jurisdictional

[4] 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.
[5] 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.
[6] 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.
[7] 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.

Excluded waters ((b)(1) – (b)(12)):[6] within the AJD boundary.				
Exclusion Name	Exclusion Size		Exclusion[7]	Rationale for Exclusion Determination
				waters.

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.

☒ Information submitted by, or on behalf of, the applicant/consultant: Mine Services Company, in a letter dated July 28, 2020, requested an AJD for streams and wetlands identified in the report entitled "Preliminaary Jurisdictional Determination Report for Little Buffalo Area – B&N Coal Co. – dated June 25, 2020" and attached delineation mapping entitled "Jurisdictional Determination Map – Little Buffalo Area – B&N Coal, Inc. – June 26, 2020".

This information is sufficient for purposes of this AJD.

Rationale: The consultant has provided all of the additional information requested to clarify site conditions. The information provided is sufficient to verify the stream and wetland locations.

☐ Data sheets prepared by the Corps: Title(s) and/or date(s).

☒ Photographs: Other: Photos provided in the July 28, 2020 Delineation Report

☐ Corps site visit(s) conducted on: Date(s).

☐ Previous Jurisdictional Determinations (AJDs or PJDs): ORM Number(s) and date(s).

☒ Antecedent Precipitation Tool: *provide detailed discussion in Section III.B*.

☐ USDA NRCS Soil Survey: Title(s) and/or date(s).

☐ USFWS NWI maps: Title(s) and/or date(s).

☐ USGS topographic maps: Title(s) and/or date(s).

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS/WBD/NHD data/maps	Sarahsville USGS topo and NHD map accessed through LRH Regulatory GIS Viewers
USDA Sources	Noble County Custom Soil Resource Report – March 2020
NOAA Sources	N/A.
USACE Sources	N/A.
State/Local/Tribal Sources	N/A.
Other Sources	N/A

B. Typical year assessment(s): The antecedent precipitation tool was utilized to determine typical year for point-in-time data sources. The site delineation was conducted between January 21, 2020 and February 17, 2020 during a period of above average rainfall. The applicant indicated there was excessive rainfall

during and before the the site investigations. Based on the antecedent precipitation tool, the 30-day rolling total for precipitation was higher than the 30-year normal range during the January to February 2020 sampling events. Due to these high precipitation events, water was present within a majority of the ephemeral stream channels during the initial field investigations. However, during the AJD field investigation in September 2020, all of the ephemeral stream channels were dry.

C. Additional comments to support AJD: Attached "Jurisdictional Determination Map – Little Buffalo Area – B&N Coal, Inc. – September 2020", has been determined to be accurate.

TABLE 1
AJD Table
B&N Coal Company - Little Buffalo Mining Area
LRH-2020-722-MUS

Stream/Wetland Name	Flow Regime/Cowardin Class	Length/Acreage	Latitude Longitude	NWPR Jurisdiction Determination
Stream 1 UNT S.F. Buffalo Creek	Intermittent	1113 lf	39.823527 -81.427796	(a)(2) water
Stream 2 UNT S.F. Buffalo Creek	Intermittent	14 lf	39.822596 -81.428508	(a)(2) water
Stream 6 UNT S.F. Buffalo Creek	Intermittent	118 lf	39.816610 -81.430292	(a)(2) water
Stream 10 UNT S.F. Buffalo Creek	Intermittent	28 lf	39.823787 -81.425601	(a)(2) water
Stream 11 UNT S.F. Buffalo Creek	Intermittent	294 lf	39.823752 -81.425508	(a)(2) water
Stream 11 UNT S.F. Buffalo Creek	Perennial	181 lf	39.824107 -81.424474	(a)(2) water
Stream 12 UNT S.F. Buffalo Creek	Intermittent	615 lf	39.827729 -81.424038	(a)(2) water
Stream 14 UNT S.F. Buffalo Creek	Intermittent	101 lf	39.826390 -81.422986	(a)(2) water
Stream 15 UNT S.F. Buffalo Creek	Intermittent	246 lf	39.8201471 -81.424015	(a)(2) water
Stream 23 UNT Little Buffalo Creek	Intermittent	840 lf	39.812488 -81.435072	(a)(2) water
Stream 40 UNT Little Buffalo Creek	Intermittent	343 lf	39.842744 -81.419455	(a)(2) water
Stream 42 UNT Little Buffalo Creek	Intermittent	421 lf	39.841873 -81.419841	(a)(2) water

Stream 45 UNT Little Buffalo Creek	Intermittent	65 lf	39.839043 -81.422427	(a)(2) water
Stream 47 UNT Little Buffalo Creek	Intermittent	237 lf	39.836633 -81.422855	(a)(2) water
Stream 48 UNT Little Buffalo Creek	Intermittent	286 lf	39.835629 -81.421154	(a)(2) water
Stream 64 UNT S.F. Buffalo Creek	Intermittent	133 lf	39.841238 -81.416363	(a)(2) water
Stream 68 UNT S.F. Buffalo Creek	Intermittent	584 lf	39.839918 -81.419122	(a)(2) water
Stream 82 UNT S.F. Buffalo Creek	Intermittent	105 lf	39.829039 -81.419445	(a)(2) water
Stream 93 UNT S.F. Buffalo Creek	Intermittent	169 lf	39.834398 -81.418252	(a)(2) water
Stream 93 UNT S.F. Buffalo Creek	Perennial	332 lf	39.833972 -81.418126	(a)(2) water
Wetland A (Stream 1)	PEM	0.02 acre	39.823644 -81.427734	(a)(4) water
Wetland G (Stream 11)	PEM	0.05 acre	39.824184 -81.424678	(a)(4) water
Wetland H (Stream 12)	PEM	0.008 acre	39.827052 -81.423887	(a)(4) water
Wetland Z (Stream 6)	PEM	0.01 acre	39.817459 -81.430948	(a)(4) water
EWI-1 (Stream 6)	Open-Water Impoundment	0.58 acre	39.817141 -81.430662	(a)(3) water
TOTAL STREAM	**5,713 linear feet intermittent stream 513 linear feet perennial stream**			
TOTAL WETLAND	**0.092 acre wetland**			
TOTAL OPEN-WATER IMPOUNDMENT	**0.58 acre open-water impoundment**			

TABLE 2
Non-Jurisdictional Waters Table
B&N Coal Company - Little Buffalo Mining Area
LRH-2020-722-MUS

Stream/Wetland Name	Flow Regime/Cowardin Class	Length/Acreage	Latitude Longitude	NWPR Jurisdiction Determination
Stream 6 UNT S.F. Buffalo Creek	Ephemeral	422 lf	39.818610 -81.430905	(b)(3) water
Stream 7 UNT Little Buffalo Creek	Ephemeral	171 lf	39.825210 -81.427736	(b)(3) water
Stream 8 UNT Little Buffalo Creek	Ephemeral	75 lf	39.825694 -81.427645	(b)(3) water
Stream 9 UNT Little Buffalo Creek	Ephemeral	79 lf	39.825890 -81.427515	(b)(3) water
Stream 15 UNT S.F. Buffalo Creek	Ephemeral	526 lf	39.821444 -81.424845	(b)(3) water
Stream 16 UNT S.F. Buffalo Creek	Ephemeral	63 lf	39.814833 -81.426661	(b)(3) water
Stream 19 UNT Little Buffalo Creek	Ephemeral	159 lf	39.818402 -81.434423	(b)(3) water
Stream 23 UNT Little Buffalo Creek	Ephemeral	837 lf	39.814565 -81.433935	(b)(3) water
Stream 28 UNT S.F. Buffalo Creek	Ephemeral	18 lf	39.8110159 -81.429481	(b)(3) water
Stream 29 UNT S.F. Buffalo Creek	Ephemeral	57 lf	39.810616 -81.430158	(b)(3) water
Stream 30 UNT S.F. Buffalo Creek	Ephemeral	179 lf	39.810754 -81.430067	(b)(3) water

Stream 31 UNT S.F. Buffalo Creek	Ephemeral	16 lf	39.810811 -81.429869	(b)(3) water
Stream 35 UNT S.F. Buffalo Creek	Ephemeral	91 lf	39.810548 -81.433780	(b)(3) water
Stream 37 UNT Little Buffalo Creek	Ephemeral	97 lf	39.812739 -81.435183	(b)(3) water
Stream 38 UNT Little Buffalo Creek	Ephemeral	409 lf	39.843447 -81.419016	(b)(3) water
Stream 39 UNT Little Buffalo Creek	Ephemeral	156 lf	39.842803 -81.418919	(b)(3) water
Stream 40 UNT Little Buffalo Creek	Ephemeral	87 lf	39.842625 -81.419203	(b)(3) water
Stream 41 UNT Little Buffalo Creek	Ephemeral	157 lf	39.841864 -81.419308	(b)(3) water
Stream 42 UNT Little Buffalo Creek	Ephemeral	67 lf	39.841699 -81.419858	(b)(3) water
Stream 43 UNT Little Buffalo Creek	Ephemeral	72 lf	39.839597 -81.422305	(b)(3) water
Stream 44 UNT Little Buffalo Creek	Ephemeral	28 lf	39.839028 -81.422327	(b)(3) water
Stream 45 UNT Little Buffalo Creek	Ephemeral	277 lf	39.838792 -81.421529	(b)(3) water
Stream 46 UNT Little Buffalo Creek	Ephemeral	301 lf	39.838085 -81.422514	(b)(3) water
Stream 47 UNT Little Buffalo Creek	Ephemeral	286 lf	39.837027 -81.422017	(b)(3) water
Stream 48 UNT Little Buffalo Creek	Ephemeral	352 lf	39.836497 -81.420677	(b)(3) water
Stream 49 UNT Little Buffalo Creek	Ephemeral	90 lf	39.835729 -81.420882	(b)(3) water
Stream 50	Ephemeral	38 lf	39.835649	(b)(3) water

UNT Little Buffalo Creek			-81.420973	
Stream 51 UNT Little Buffalo Creek	Ephemeral	43 lf	39.835310 -81.421577	(b)(3) water
Stream 53 UNT Little Buffalo Creek	Ephemeral	51 lf	39.8345310 -81.394400	(b)(3) water
Stream 55 UNT Little Buffalo Creek	Ephemeral	75 lf	39.835009 -81.422113	(b)(3) water
Stream 56 UNT Little Buffalo Creek	Ephemeral	43 lf	39.829248 -81.426697	(b)(3) water
Stream 57 UNT Little Buffalo Creek	Ephemeral	389 lf	39.823895 -81.425588	(b)(3) water
Stream 59 UNT Little Buffalo Creek	Ephemeral	113 lf	39.828180 -81.391933	(b)(3) water
Stream 61 UNT Little Buffalo Creek	Ephemeral	123 lf	39.827975 -81.426452	(b)(3) water
Stream 64 UNT S.F. Buffalo Creek	Ephemeral	137 lf	39.841383 -81.416793	(b)(3) water
Stream 65 UNT S.F. Buffalo Creek	Ephemeral	62 lf	39.841174 -81.416568	(b)(3) water
Stream 66 UNT S.F. Buffalo Creek	Ephemeral	194 lf	39.839792 -81.418223	(b)(3) water
Stream 67 UNT S.F. Buffalo Creek	Ephemeral	89 lf	39.840122 -81.418957	(b)(3) water
Stream 68 UNT S.F. Buffalo Creek	Ephemeral	169 lf	39.840312 -81.419391	(b)(3) water
Stream 69 UNT S.F. Buffalo Creek	Ephemeral	291 lf	39.8393790 -81.392256	(b)(3) water
Stream 70 UNT S.F. Buffalo Creek	Ephemeral	29 lf	39.839327 -81.419488	(b)(3) water
Stream 71	Ephemeral	62 lf	39.838403 -81.418189	(b)(3) water

UNT S.F. Buffalo Creek				
Stream 72 UNT S.F. Buffalo Creek	Ephemeral	215 lf	39.837732 -81.418385	(b)(3) water
Stream 73 UNT S.F. Buffalo Creek	Ephemeral	20 lf	39.837704 -81.417486	(b)(3) water
Stream 74 UNT S.F. Buffalo Creek	Ephemeral	141 lf	39.835178 -81.416039	(b)(3) water
Stream 75 UNT S.F. Buffalo Creek	Ephemeral	56 lf	39.834627 -81.388229	(b)(3) water
Stream 77 UNT S.F. Buffalo Creek	Ephemeral	260 lf	39.832258 -81.415839	(b)(3) water
Stream 82 UNT S.F. Buffalo Creek	Ephemeral	430 lf	39.828857 -81.420883	(b)(3) water
Stream 84 UNT S.F. Buffalo Creek	Ephemeral	612 lf	39.832649 -81.421671	(b)(3) water
Stream 86 UNT S.F. Buffalo Creek	Ephemeral	41 lf	39.832642 -81.421258	(b)(3) water
Stream 92 UNT S.F. Buffalo Creek	Ephemeral	74 lf	39.833506 -81.418357	(b)(3) water
Wetland B (Stream 1)	PEM	0.007 acre	39.822154 -81.428654	(b)(1) water
Wetland C (Stream 1)	PEM	0.011 acre	39.821101 -81.428738	(b)(1) water
Wetland D (Stream 6)	PEM	0.036 acre	39.818734 -81.430805	(b)(1) water
Wetland E (Stream 6)	PEM	0.012 acre	39.819044 -81.431113	(b)(1) water
Wetland F (Stream 6)	PEM	0.013 acre	39.819617 -81.431041	(b)(1) water
Wetland K (Stream 12)	PEM	0.351 acre	39.825239 -81.420971	(b)(1) water
Wetland M (Stream 16)	PEM	0.015 acre	39.814954 -81.426466	(b)(1) water
Wetland N (Stream 15)	PEM	0.04 acre	39.816856 -81.424699	(b)(1) water
Wetland Q	PEM	0.051 acre	39.813606	(b)(1) water

(Stream 23)			-81.434593	
Wetland U (Stream 39)	PEM	0.03 acre	39.842914 -81.418772	(b)(1) water
Wetland V (Stream 38)	PEM	0.022 acre	39.843459 -81.419346	(b)(1) water
Wetland W (Stream 57)	PEM	0.009 acre	39.828998 -81.425420	(b)(1) water
Wetland X (Stream 82)	PEM	0.017 acre	39.828568 -81.422122	(b)(1) water
Wetland Y (Stream 11)	PEM	0.01 acre	39.824422 -81.423865	(b)(1) water
Wetland XX (Stream 15)	PEM	0.023 acre	39.821127 -81.425027	(b)(1) water
Wetland XZ (Stream 15)	PEM	0.01 acre	39.834676 -81.415493	(b)(1) water
TOTAL NON-JURISIDCTIONAL STREAMS	**8,823 linear feet**			
TOTAL NON-JURISIDCTIONAL WETLANDS	**0.667 acre**			