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, 2023
- B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CESWL-RD, Clark AML Project, SWL-2022-00327

\boldsymbol{C}	PROJECTI	OCATION	AND BACKCR	OUND INFORM	ATION
٠.	PROJECTI	AALIUN	AND DAUNUTK	OUND INFORM	IA LIUN:

State: Arkansas County/parish/borough: Sebastian City: Greenwood

Center coordinates of site (lat/long in degree decimal format): Lat. 35.2246°, Long. -94.2311 °

Universal Transverse Mercator: NAD 83/UTM Zone 15, 3898645 Northing, 387965 Easting

Name of nearest waterbody: Vache Grass Creek

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

Name of watershed or Hydrologic Unit Code (HUC): 11110201 (Frog-Mulberry)

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

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☑ Office (Desk) Determination. Date: December 13, 2022

Field Determination. Date(s): November 21, 2022

SECTION II: SUMMARY OF FINDINGS

JD form.

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 no "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.

TNWs, including territorial seas
Wetlands adjacent to TNWs
Relatively Permanent Waters ² (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

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

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: acres.

c. Limits (boundaries) of jurisdiction based on:

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: A wetland delineation by the Agent (CEC) identified the following aquatic features that would unlikely be considered jurisdictional due to their geographic isolation: OWF-1, WTL-6, WTL-7a, WTL-7b, WTL-8, WTL-9, and STR-4. OWF-1 is an approximately 6.3-acre water-filled abandoned mining pit constructed in uplands that has no connection to waters of the United States (WOTUS). A man-made ephemeral channel (STR-4) was observed abutting OWF-1; however, this channel connects to an isolated wetland (WTL-8) and does not support a hydrologic connection to WOTUS. A total of five wetland features (WTL-6, WTL-7a,

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

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

³ Supporting documentation is presented in Section III.F.

WTL-7b, WTL-8, and WTL-9) were created incidentally as a result of mining activities. These features are located in mine spoils and are situated at elevations above the surrounding landscape (the surrounding area is generally located within a FEMA-mapped 100-yr floodplain; however, these features are not). These wetland features retain stormwater in response to precipitation events and were all observed to be geographically isolated. Therefore, these features, including the abandoned mining pit and ephemeral channel, would not be regulated under Section 404 of the CWA.

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: Drainage area:
	Average annual rainfall: inches Average annual snowfall: inches
(ii)	Physical Characteristics: (a) Relationship with TNW: ☐ Tributary flows directly into TNW. ☐ Tributary flows through tributaries before entering TNW.
	Project waters are river miles from TNW. Project waters are river miles from RPW. Project waters are aerial (straight) miles from TNW. Project waters are aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain:
	Identify flow route to TNW ⁵ : Tributary stream order, if known:
	(b) General Tributary Characteristics (check all that apply):

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

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.

		Tributary is:			(man-made). E	_	ain:		
		Tributary prope Average wid Average dep Average side	dth: fee oth: fee	et t	to top of bank (e	estimate)):		
		Primary tributary Silts Cobble Bedroc Other.	es ck		sition (check all Sands Gravel Vegetation. T				Concrete Muck
		Tributary condition Presence of run/r Tributary geomet Tributary gradien	riffle/po try:	ol comple	xes. Explain:		g banks].]	Explai	in:
	(c)	Flow: Tributary provide Estimate average Describe flo Other information Surface flow is: Subsurface flow: Dye (or	numbe ow regin n on du Charac Expla	ne: ration and teristics: in finding	volume:	area/yea	ar:		
		clea	d banks M ⁶ (checker, natural natura natural natural natural natural natural natural natural natural	ck all indicated line important the character matted do isturbed or eposition ing	cators that apply pressed on the batter of soil wn, bent, or absort washed away	ank 🗌	destruction the present sediment scour multiple of	on of tence of sorting	litter and debris errestrial vegetation wrack line g ed or predicted flow events n plant community
		☐ High T☐ oil o☐ fine☐ phy☐ tida	ide Line or scum shell o	e indicated line along r debris de arkings/ch s		□ M	ean High W survey to physical r	Vater N availa narkin	WA jurisdiction (check all that apply): Mark indicated by: ble datum; ngs; /changes in vegetation types.
(iii)	Cha	emical Characteri racterize tributary Explain: utify specific pollu	(e.g., w		is clear, discolo	red, oily	film; wate	er qual	ity; general watershed characteristics, etc.).
(iv)	Biol	ogical Character Riparian corridor					apply):		

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.

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	Ш	Wetland fringe. Characteristics:
		Habitat for:
		☐ Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
		☐ Aquatic/wildlife diversity. Explain findings:
Cha	aract	teristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i)		ysical Characteristics:
	(a)	General Wetland Characteristics: Properties:
		Wetland size: acres
		Wetland type. Explain:
		Wetland quality. Explain:
		Project wetlands cross or serve as state boundaries. Explain:
	(b)	General Flow Relationship with Non-TNW:
		Flow is: Explain:
		Surface flow is: Characteristics:
		Subsurface flow: Explain findings:
		Dye (or other) test performed:
	(-)	
	(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting
		☐ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain:
		Ecological connection. Explain:
		Separated by berm/barrier. Explain:
		- • •
	(d)	Proximity (Relationship) to TNW
		Project wetlands are river miles from TNW. Project waters are aerial (straight) miles from TNW.
		Flow is from:
		Estimate approximate location of wetland as within the floodplain.
(ii)		emical Characteristics:
		aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics
). Explain: ntify specific pollutants, if known:
		
(iii)	_	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Vegetation type/percent cover. Explain:
		Habitat for:
	ш	
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
		Aquatic/wildlife diversity. Explain findings:
Cha	aract	teristics of all wetlands adjacent to the tributary (if any)
		wetland(s) being considered in the cumulative analysis:
	App	proximately () 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>

Summarize overall biological, chemical and physical functions being performed:

3.

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:

DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT

AP	PLY):
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 ⁸ 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

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tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

⁸See Footnote # 3.

		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 abuttin 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 jurisidictional. 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 wit 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. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. □ Demonstrate that impoundment was created from "waters of the U.S.," or
		Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
		Demonstrate that water is isolated with a nexus to commerce (see E below).
E.	OR ALI	LATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATIC DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECL 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:
	Idei	ntify water body and summarize rationale supporting determination:
	Prov	vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft).
		Other non-wetland waters: acres.
	П	Identify type(s) of waters:
		Wetlands: acres.
F.	NO	N-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 Wetlan 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):
	(i.e.	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors, presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment ck all that apply):
	$\overline{\mathbf{A}}$	Non-wetland waters (i.e., rivers, streams): STR-4: 104 linear feet 3 width (ft).
		Lakes/ponds: acres.
	\checkmark	Other non-wetland waters: OWF-1 6.3 acres. List type of aquatic resource: water-filled abandoned mining pit.
	$\overline{\mathbf{A}}$	Wetlands: 0.32 acre (WTL-6: 0.073 acre; WTL-7a: 0.163 acre; WTL-7b: 0.021 acre; WTL-8: 0.041 acre; WTL-9: 0.023 acre).

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.

		ing 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.
SEC	TIO	ON IV: DATA SOURCES.
		PPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and nested, appropriately reference sources below):
	v	Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Wetland and Stream Delineation Report Clark Abandoned Mine Lands Site, Sebastian County, Arkansas prepared by Civil & Environmental Consultants, Inc. (CEC) dated October 2022.
	$\overline{\mathbf{V}}$	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:
	V	U.S. Geological Survey Hydrologic Atlas: NHD data accessed via National Regulatory Viewer on November 14, 2022. HUC 8: 11110201; HUC 12: 111102010102 (Middle Vache Grass Creek). ☑ USGS NHD data.
		✓ USGS 8 and 12 digit HUC maps.
	$ \sqrt{} $	U.S. Geological Survey map(s). Cite scale & quad name: Burnville, AR (1:24k)
	\checkmark	USDA Natural Resources Conservation Service Soil Survey. Citation: Soil data provided by CEC in wetland delineation.
	$ \sqrt{} $	National wetlands inventory map(s). Cite name: NWI maps provided by CEC in wetland delineation report.
		State/Local wetland inventory map(s):
	$\overline{\mathbf{A}}$	FEMA/FIRM maps:
		100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
	$\overline{\square}$	Photographs: Aerial (Name & Date): Google Earth (1994-2021); maps provided by CEC in wetland delineation report.
		or Other (Name & Date): Site photographs provided by CEC in wetland delineation report.
		Previous determination(s). File no. and date of response letter:
		Applicable/supporting case law: Applicable/supporting scientific literature:
		Other information (please specify): Corps site visit on November 21, 2022. National Regulatory Viewer (accessed November 30,
	V	2022).
WTI mini of the nowe	L-6, Yng og e CV ever,	DITIONAL COMMENTS TO SUPPORT JD: The abandoned mining pit (OWF-1 totaling 6.3-acres) and associated wetlands (WTL-WTL-7a, WTL-7b, WTL-8, and WTL-9, cumulatively totaling approximately 0.32 acre) were constructed in uplands as a result of past perations. The abandoned mining pit and associated wetlands are geographically isolated and would not be regulated under Section 404 VA. An ephemeral channel (STR-4) that connects OWF-1 to WTL-8 (extending approximately 104 linear feet), supports an OHWM, this channel flows into features that are themselves geographically isolated, therefore, the channel itself is geographically isolated, connection to WOTUS.
		January 5, 2023
<u> </u>	Davi	d Rupe Date
		ect Manager