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): December 20, 2022

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CESWL-RD, SWL 2022-00315

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: Arkansas County/parish/borough: Benton City: Siloam Springs
Center coordinates of site (lat/long in degree decimal format): Lat. 36.1799°, Long. -94.5213°
Universal Transverse Mercator: NAD 83/UTM Zone 15, Northing, Easting
Name of nearest waterbody: Sager Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Illinois River
Name of watershed or Hydrologic Unit Code (HUC): 11110103 (Illinois River)

☑ 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: November 30, 2022
☑ Field Determination. Date(s): December 7, 2022

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 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
☐ 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: Intermittent Channel 1: 567 linear feet; 8 width (ft). Intermittent Channel 2: 756 linear feet; 4-6 width (ft).
Wetlands: Total wetland area 0.2 acres. Wetland A: 0.17 acres; Wetland B: 0.03 acres

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known):

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

☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

[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.

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW:

   Summarize rationale supporting determination:

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent":

B. Characteristics of Tributary (That Is Not a TNW) and Its Adjacent Wetlands (If Any):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e., tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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: 1,671 square miles
   Drainage area: 0.66 square miles

   Average annual rainfall: 47.9 inches
   Average annual snowfall: 11 inches

   (ii) Physical Characteristics:
   (a) Relationship with TNW:
   ☐ Tributary flows directly into TNW.
   ☑ Tributary flows through tributaries before entering TNW.

   Project waters are 30 (or more) river miles from TNW.
   Project waters are 1 (or less) river miles from RPW.
   Project waters are 20-25 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 do not cross or serve as state boundaries.

   Identify flow route to TNW[5]: Sager Creek to Flint Creek to Illinois River
   Tributary stream order, if known: 2

   (b) General Tributary Characteristics (check all that apply):
   Tributary is: ☑ Natural
   ☐ Artificial (man-made). Explain:
   ☑ Manipulated (man-altered). Explain: Aerial imagery over the last 30 years indicates placement of fill and grading across the subject property; the intermittent channel located on the west border of the action area and the intermittent channel crossing the central portion of the action area have been in the same location despite activity over time. Other aquatic features appear to have been dredged and filled historically due to development in areas outside of the action area and within the project area to maintain agricultural use (crops/hay).

[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 properties with respect to top of bank (estimate):
Average width: Intermittent Channel 1: 8 ft; Intermittent Channel 2: 4-6 ft.
Average depth: Intermittent Channel 1: 0.75 ft; Intermittent Channel 2: 0.5 ft.
Average side slopes: 4:1 (or greater)

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: Tributaries exhibited silty bed and banks with early successional vegetation communities (herbaceous growth, grasses, some small shrubs and trees). Appear to be relatively stable channels draining mostly stormwater runoff and relief from upstream developed areas of the drainage.
Presence of run/riffle/pool complexes. Explain: Both intermittent channels are uniform in substrate and geomorphology and do not exhibit any distinct riffle/pool complexes.

Tributary geometry: Relatively Straight
Tributary gradient (approximate average slope): <1 %

(c) Flow:
Tributary provides for: Seasonal Flow
Estimate average number of flow events in review area/year: 20 (or greater)

Describe flow regime: stormwater runoff upstream, and upland drainage. Stream is intermittent, flashy.
Other information on duration and volume: Gage data is not available for this stream. These predictions are corroborated with watershed reports compiled using the USGS StreamStats software, historical aerial imagery, and site photos.

Surface flow is: Discrete and Confined Characteristics: Uniformly slow flowing channels.
Subsurface flow: Unknown Explain findings: There is likely a small effect of hyporheic exchange through silt loam soils as a result of upland drainage with the exception of during drought periods.
☐ Dye (or other) test performed:

Tributary has (check all that apply):
☑ Bed and banks
☑ OHWM[6] (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: Water color appears to be high in turbidity due to elevated amounts of humic colloidal matter, dissolved organic carbons, and other types of dark pigmented sediments. Tributary channels exhibit dark discoloration due to high amounts of

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

organic matter and local soil compositions. Water quality is likely poor due to urban run-off upstream and localized impacts from historical agricultural use resulting in elevated amounts of organic inputs of nitrogen and phosphorus.

Identify specific pollutants, if known: No observable pollutants; the area is likely to experience common pollutant loads typical of urban developed areas (e.g. organic inputs from livestock and chicken litter application, pesticides, fertilizers, etc.).

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

- ☑ Riparian corridor. Characteristics (type, average width): Intermittent Channel 1: 4 ft. average width, early successional mixed woody and herbaceous facultative wetland vegetation community. Intermittent Channel 2: 10 ft average width, herbaceous facultative wetland vegetation community.
- ☐ 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: The area likely provides habitat for aquatic organisms such as species of macroinvertebrates, fishes, and amphibians. Biota serve as an integral part of the local food web attracting predators such as other herpetofauna and vertebrate taxa (racoons and other small mammals), and birds.

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: Wetland 1: 0.17 acres; Wetland 2: 0.03 acres

Wetland type. Explain: Both Wetland 1 and Wetland 2 are palustrine emergent wetlands formed by depressions and abutting intermittent tributaries.

Wetland quality. Explain: Both Wetland 1 and Wetland 2 are low functioning wetlands with low capacity for flood storage and abatement as well as reducing sediment loads downstream. They likely provide sub-optimal habitat for wildlife.

Project wetlands cross or serve as state boundaries. Explain: No, project wetlands do not cross or serve as state boundaries.

(b) General Flow Relationship with Non-TNW:

Flow is: Ephemeral Flow Explain: Wetland has potential to flow into non-TNW during high precipitation and runoff events; flow into non-TNW during dry periods is highly reduced and non-existent at times. Abutting non-TNW stream is intermittent, flashy likely re-wetting wetland during heavy rain events. Stormwater sheet flow from upland areas also likely contributes to observable flow of wetlands during heavy precipitation events.

Surface flow is: Discrete and Confined

Characteristics: Surface flow is discrete within the wetland and confined when it reaches the channel of the offsite relevant reach tributary.

Subsurface flow: Unknown Explain findings: There is likely a small effect of hyporheic exchange through silt loam soils as a result of upland drainage with the exception of during drought periods.

☐ 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 30 (or more) river miles from TNW.

Project waters are 30 (or more) aerial (straight) miles from TNW.

Flow is from: Wetland to Navigable Waters

Estimate approximate location of wetland as within the 2-year or less 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: Water color is dark brown in color with highly degraded water quality due to urban and agriculture run-off.

Identify specific pollutants, if known: The area is likely to experience common pollutant loads typical of urban subdivisions (e.g. pesticides, fertilizers, etc.).

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

☐ Riparian buffer. Characteristics (type, average width):

☑ Vegetation type/percent cover. Explain: Wetland A and B were heavily dominated by facultative wetland herbaceous growth (*Dicanthelium scoparium, Tridens strictus, Echinochloa crus-galli, Ludwigia palustris, Diodia virginia, Carex spp., Juncus spp.*, etc.) ranging from 50-95% cover.

☑ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☐ Other environmentally-sensitive species. Explain findings:

☑ Aquatic/wildlife diversity. Explain findings: The area likely provides habitat for aquatic fauna such as macroinvertebrates, crayfish, and amphibians. Local biota serve an integral part of the food web attracting predators such as other herpetofauna and vertebrate taxa (racoons and other small mammals), and birds. Due to the low quality of habitat, poor water quality, and heavy disturbance, the area most likely only supports environmentally tolerant species.

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

All wetland(s) being considered in the cumulative analysis:
Approximately (0.20) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Yes	0.17 acres		
Yes	0.03 acres		

Summarize overall biological, chemical and physical functions being performed: Wetland function is of low quality and heavily impacted by urban and agriculture activity causing highly degraded water quality and poor habitat quality for wildlife. Wetlands likely functions at some low level for storm water retention or flood abatement as well as excess nutrient uptake, retention, and decomposition.

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? Yes
- 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? Yes
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs? Yes
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW? Yes

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:

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: Both intermittent channels were exhibiting observable flow with a well defined OHWM. USGS Stream data also validates field observations.

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

☑ Tributary waters: Intermittent Channel A – 567 linear feet 8 width (ft); Intermittent Channel B – 756 linear feet 4-6 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 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: Imagery, agent's delineation report, and field observations all corroborate direct, observable connection between wetlands and RPW.

Provide acreage estimates for jurisdictional wetlands in the review area: Wetland A – 0.17 acres; Wetland B – 0.03 acres.

☐ 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.

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

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

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

6. 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.," 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. 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.

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[8]See Footnote # 3.

[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.*

☐ 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:

☐ Other non-wetland waters: acres.

Identify type(s) of waters:

☐ Wetlands:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.

☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.

☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).

☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:

☐ Other: (explain, if not covered above):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource: .

☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).

☐ Lakes/ponds: acres.

☐ Other non-wetland waters: acres. List type of aquatic resource: .

☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

☑ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: 2022-10-11 FTN LTR to USACE-AJD McClelland HWY 412

☑ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☑ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps:

☐ Corps navigable waters' study:

☑ U.S. Geological Survey Hydrologic Atlas:

☑ USGS NHD data.

☑ USGS 8 and 12 digit HUC maps. HUC 8: 11110103 (Illinois); HUC 12: 11110103001375

☑ U.S. Geological Survey map(s). Cite scale & quad name: US Geological Survey (USGS) topographic quadrangle Siloam Springs, AR (7.5-minute series)

☑ USDA Natural Resources Conservation Service Soil Survey. Citation: NRCS web soil survey

☑ National wetlands inventory map(s). Cite name: U. S. Fish and Wildlife Service. Publication date (found in metadata). National Wetlands Inventory website (accessed Nov 2022)

☐ State/Local wetland inventory map(s):

☐ FEMA/FIRM maps:

☑ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)

☐ Photographs: ☑ Aerial (Name & Date): SWL 2022-00315 Maps & Figures; Google Earth Pro. (2006-2021 Imagery).

☐ or ☑ Other (Name & Date): 2022-10-11 FTN LTR to USACE-AJD McClelland HWY 412

☐ Previous determination(s). File no. and date of response letter:

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☑ Other information (please specify): Google Earth Pro. (2012-2021 Imagery Lat. *36.1799°, Long. -94.5213°*) accessed Nov 2022). U.S. Geological Survey, 2016, The StreamStats program, online at http://streamstats.usgs.gov (accessed on Nov 2022).

B. ADDITIONAL COMMENTS TO SUPPORT JD: In summary, two intermittent channels (tributaries to Sager Creek), one approximately 567 linear feet and a second approximately 756 linear feet, as well as Wetland A and B totaling 0.2 acres are identified as waters of the U.S. and are therefore jurisdictional.

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Pablo Bacon
Regulatory Specialist

December 20, 2022
Date