

**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 10, 2020**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Sacramento District, Davis West Side Corridor, SPK-2007-01985

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State: Utah County/parish/borough: Davis County City: Syracuse

Center coordinates of site (lat/long in degree decimal format): Lat. 41.0922°, Long. -112.0830°

Universal Transverse Mercator: 12 409053 4549527

Name of nearest waterbody: Great Salt Lake

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Great Salt Lake

Name of watershed or Hydrologic Unit Code (HUC): Lower Weber, 16020102

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: The subject of this form is AJD Area 1, which is comprised of contiguous wetland polygons labeled 08-IW-26A and 08-IW-26B. AJD Area 2 is addressed in a separate basis for determination.

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

Office (Desk) Determination. Date: January 10, 2020

Field Determination. Date(s): April 23, 2019; October 10, 2018; September 6, 2018; and July 5, 2017.

**SECTION II: SUMMARY OF FINDINGS**

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION.**

There **are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There **are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area (check all that apply):<sup>1</sup>**

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters<sup>2</sup> (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: linear feet, wide, and/or acres.

Wetlands: 11.63 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):<sup>3</sup>**

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**

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

<sup>2</sup> 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).

<sup>3</sup> 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: Great Salt Lake

Summarize rationale supporting determination: In *Utah v. U.S.*, 403 U.S. 9 (S.Ct. 7 June 1971) the Supreme Court of the United States determined that the Great Salt Lake was navigable-in-fact under federal law. This decision was based on the finding that the Great Salt Lake was used in the past in interstate or foreign commerce. (See footnote 20, *Grumbles & Woodley*, 2008, *Clean Water Act Jurisdiction* Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States*).

2. **Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is "adjacent": Not applicable

**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<sup>4</sup> 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: 1,320 **square miles**

Drainage area: N/A **Pick List**

Average annual rainfall: 26.3 inches

Average annual snowfall: 31.9 inches

(ii) **Physical Characteristics:**

(a) **Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **2-5** river miles from TNW.

Project waters are **1 (or less)** river miles from RPW.

Project waters are **1-2** aerial (straight) miles from TNW.

Project waters are **1 (or less)** aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: Project waters do not cross or serve as a state boundary.

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

Identify flow route to TNW<sup>5</sup>: The relevant reach begins north of the review area at approximately 819 S 3000 W where perennial flow begins. Water flows south from this point approximately 2,830 feet to the AJD Area 1 wetland. Water flows from AJD Area 1 into a 30-inch reinforced concrete pipe that flows south approximately 1,020 feet along the west side of the review area, along S 3000 W, to W 1700 S. The AJD Area 1 wetland is in contact with the relevant reach at three locations. At the intersection of S 3000 W and W 1700 S, the concrete pipe joins a 24-inch reinforced concrete pipe. The combined flow from these pipes flows into a 36-inch reinforced concrete pipe flowing west along W 1700 S for approximately one mile where it joins another 36-inch reinforced concrete pipe before day-lighting into an open ditch at approximately S 4000 W. This open ditch runs along the south side of W 1700 S for approximately 1,650 feet, before turning sharply south and flowing in a general southwesterly direction, along the northwest side of the North Davis sewer plant, and then to the Great Salt Lake at Farmington Bay (another approximately 4,200 feet as measured to the Great Salt Lake Meander line). Total distance between the AJD Area 1 wetland and the Great Salt Lake at the meander line as measured along this flow route is approximately 2.3 miles. The total distance from the point where perennial flow begins at approximately 819 South 3000 West, to the Great Salt Lake is approximately 3 miles. During the course of this three miles, it joins no other stream of the same or larger stream order before reaching the Great Salt Lake making this three miles the relevant reach of the tributary for this analysis.

Tributary stream order, if known: Not applicable.

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

- Tributary is:**
- Natural
  - Artificial (man-made). Explain: Above the intersection of S 4000 W and W 1700 S the tributary flows in a reinforced concrete pipe. From this intersection approximately 1,650 feet west, the tributary flows through an open ditch.
  - Manipulated (man-altered). Explain: The last 4,200 feet of the tributary before entering the Great Salt Lake is a channelized stream.

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

Average width: 3 feet  
Average depth: 3 feet  
Average side slopes: **3:1**.

**Primary tributary substrate composition (check all that apply):**

- Silts
- Sands
- Concrete
- Cobbles
- Gravel
- Muck
- Bedrock
- Vegetation. Type/% cover:
- Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: stable

Presence of run/riffle/pool complexes. Explain: None

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): 0.16%

(c) Flow:

Tributary provides for: **Perennial**

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

Describe flow regime: Continuous, year round

Other information on duration and volume:

Surface flow is: **Discrete and confined**. Characteristics: Conveyed in discrete, confined pipes, ditches and channelized stream.

Subsurface flow: **Unknown**. Explain findings:

- Dye (or other) test performed: USACE staff conducted a dye test on 20 April 2004, which included a portion of the tributary as a component of the approved jurisdictional determination for SPK-1994-0037. This dye test demonstrated flow through the pipe along W 1700 S and through the flow route described above to the Great Salt Lake. This included the portion of the flow route at issue here from the intersection of S 4000 W and W 1700 S to the Great Salt Lake.

Tributary has (check all that apply):

- Bed and banks

<sup>5</sup> 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.

- OHWM<sup>6</sup> (check all indicators that apply):
    - clear, natural line impressed on the bank
    - changes in the character of soil
    - shelving
    - vegetation matted down, bent, or absent
    - leaf litter disturbed or washed away
    - sediment deposition
    - water staining
    - other (list): Syracuse City Engineer perennial flow statement March 4, 2019. Destruction of terrestrial vegetation visible in aerial imagery which shows a channel with sparse or no vegetation below the day-lighted portion of the tributary. Sediment deposition is apparent in day-lighted portion via the formation of islands in the channel visible in aerial imagery.
  - the presence of litter and debris
  - destruction of terrestrial vegetation
  - the presence of wrack line
  - sediment sorting
  - scour
  - multiple observed or predicted flow events
  - abrupt change in plant community
- Discontinuous OHWM.<sup>7</sup> Explain: A large portion of the tributary is encapsulated in a concrete pipe. We note that USACE staff observed water staining, sediment deposits, and vegetation matted and bent at the contact points between the AJD Area 1 wetland and the relevant reach (Wilson, May 24, 2019) indicating that the OHWM exists at these points where the piped tributary comes into contact with the surface at AJD Area 1. Additionally we have documentation from the Syracuse City Engineer (March 4, 2019) that water flows within this pipe year round at the point where it is in contact with the AJD Area 1 wetland. USACE has previously determined that there is an OHWM in the ditch where this pipe day-lights (SPK-1994-0037).

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- High Tide Line indicated by:
  - oil or scum line along shore objects
  - fine shell or debris deposits (foreshore)
  - physical markings/characteristics
  - tidal gauges
  - other (list):
- Mean High Water Mark indicated by:
  - survey to available datum;
  - physical markings;
  - vegetation lines/changes in vegetation types.

**(iii) Chemical Characteristics:**

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

Identify specific pollutants, if known: The North Davis Waste Water Treatment Plant has permits to discharge to the relevant reach (Major Municipal Permit No. UT0021741, Biosolids Permit No. UTL021741, Storm Water Permit No. UTR000000). These permit the WWTP to discharge treated sanitary sewer effluent and storm water effluent. The specific pollutants discharged include dissolved solids, suspended solids, bacteria and other pathogens, nitrogen compounds, phosphorous compounds, oil, and grease. The effluent includes compounds that affect pH and dissolved oxygen in the relevant reach. Accepted results published on the Ambient Water Quality Monitoring System (<https://awqms.utah.gov/>) document the presences of the following chemical compounds in the relevant reach above the WWTP: ammonia-nitrogen, arsenic, barium, boron, calcium, chloride, chromium, copper, inorganic nitrogen, iron, lead, magnesium, mercury, phosphate-phosphorus, potassium, and sodium.

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

- Riparian corridor. Characteristics (type, average width):
- 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:

**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: **11.63** acres  
 Wetland type. Explain: PEM

<sup>6</sup>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.

<sup>7</sup>Ibid.

Wetland quality. Explain: Surrounded by urban land use and in a landscape position that receives storm water runoff. Vegetation dominated by species tolerant of poor water quality and nutrient enriched conditions.

Project wetlands cross or serve as state boundaries. Explain: The AJD Area 1 wetland does not cross or serve as a state boundary.

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: On April 23, 2019, USACE staff observed evidence of flow through the culvert into the relevant reach including a clear watermark in the culvert, algae in the ground by the culvert opening, sediment deposition and drainage patterns, bent vegetation lying in the direction toward the culvert indicating flow into the culvert, and vegetation bent into the culvert and rooted outside the culvert. The vegetation species that dominate the wetland are obligate species found in permanently and semi-permanently inundated conditions indicating water is rarely absent within this wetland. On October 10, 2018, USACE staff could hear water flowing from the Area 1 wetland into the relevant reach.

Surface flow is: **Discrete and confined**

Characteristics: The AJD Area 1 wetland touches the culvert opening to the relevant reach

Subsurface flow: **Unknown**. 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 **2-5** river miles from TNW.

Project waters are **1-2** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters**.

Estimate approximate location of wetland as within the **500-year or greater** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Vegetation dominated by species tolerant of poor water quality and nutrient enriched conditions. Landscape position is such that the wetland intercepts and stores storm water before spilling into the relevant reach.

Identify specific pollutants, if known: Unknown

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

Riparian buffer. Characteristics (type, average width):

Vegetation type/percent cover. Explain: emergent marsh and wet meadow, complete coverage

Habitat for:

Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings:

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

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

Approximately **11.63** 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>
AJD Area 1	Y	11.63		

Summarize overall biological, chemical and physical functions being performed: Runoff storage; contribution of flow; export of organic matter; nutrient recycling; sediment trapping.

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:

**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,            wide, 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: The relevant reach lies outside of the review area and is therefore not the subject of this determination. See Sec. IV.B for the rationale supporting our determination that the relevant reach 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            wide.  
 Other non-wetland waters:            acres.  
Identify type(s) of waters:

3. **Non-RPWs<sup>8</sup> 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.

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<sup>8</sup>See Footnote # 3.

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

- Tributary waters: linear feet, wide.
  - 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: The wetland physically touches the relevant reach at the location of three culvert openings. On April 23, 2019, USACE staff observed evidence of flow through the culvert into the relevant reach including a clear watermark in the culvert, algae in the ground by the culvert opening, sediment deposition and drainage patterns, bent vegetation lying in the direction toward the culvert indicating flow into the culvert, and vegetation bent into the culvert and rooted outside the culvert.
  - 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:

Provide acreage estimates for jurisdictional wetlands in the review area: **11.63** acres.

**5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

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

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

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

**7. Impoundments of jurisdictional waters.<sup>9</sup>**

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):<sup>10</sup>**

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain:
- Other factors. Explain:

**Identify water body and summarize rationale supporting determination:**

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

- Tributary waters: linear feet, wide.
  - Other non-wetland waters: acres.
- Identify type(s) of waters:
- Wetlands: acres.

<sup>9</sup> To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup> Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

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

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
  - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:
- Other: (explain, if not covered above):

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,            wide.
- 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,            wide.
- 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:
- 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. Office does not concur that the wetlands in the review area are hydrologically isolated.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
  - USGS NHD data. USGS. August 13, 2013. National Hydrography Dataset Plus High Resolution (NHDPlus HR) for 4-digit Hydrologic Unit - 1602
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 1:24K Clearfield 2017
- USDA Natural Resources Conservation Service Soil Survey. Citation: Web Soil Survey (Davis and Weber Areas)
- National wetlands inventory map(s). Cite name: Accessed January 8, 2020 at <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>
- State/Local wetland inventory map(s):
- FEMA/FIRM maps: Map Number 49011C0205E June 18, 2007
- 100-year Floodplain Elevation is: (North American Vertical Datum of 1988) 4219
- Photographs:  Aerial (Name & Date): Google Earth imagery dated July 18, 2019 and September 10, 2018; August 9, 2006, NAIP; October 1, 1997, Digital Ortho Quarter Quads; and August 17, 1993, NAPP.  
or  Other (Name & Date): Photographs in delineation report and photographs from Corps site visits (see File)
- Previous determination(s). File no. and date of response letter:
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify):

Bloemen, Brian. March 4, 2019. Correspondence from Mr. Brian Bloemen, Syracuse City Engineer, to Mr. Matt Wilson, USACE, on the subject of perennial flow in the relevant reach.

Bloemen, Brian. December 27, 2018. Correspondence from Mr. Brian Bloemen, Syracuse City Engineer, to Mr. Matt Wilson, USACE including file labeled "Storm Drain.gdb.zip".

AgACIS. December 23, 2019. Weather Station: Weber Basin Pump Plant 3, Total Snowfall Normal. <http://agacis.rcc-acis.org/?fips=49011>.

AgACIS. December 23, 2019. Weather Station: Weber Basin Pump Plant 3, Total Precipitation Normal. <http://agacis.rcc-acis.org/?fips=49011>.



UDEQ. December 5, 2016. Utah Pollutant Discharge Elimination System (UPDES) Permits. Major Municipal Permit No. UT0021741, Biosolids Permit No. UTL021741, and Storm Water Permit No. UTR000000 issued to North Davis Sewer District.

USGS. August 13, 2018. National Hydrography Dataset Plus High Resolution (NHDPlus HR) for 4-digit Hydrologic Unit 1602. [ftp://rockyftp.cr.usgs.gov/vdelivery/Datasets/Staged/Hydrography/NHDPlus/HU4/HighResolution/GDB/NHDPLUS\\_H\\_1602\\_HU4\\_GDB.zip](ftp://rockyftp.cr.usgs.gov/vdelivery/Datasets/Staged/Hydrography/NHDPlus/HU4/HighResolution/GDB/NHDPLUS_H_1602_HU4_GDB.zip).

## **B. ADDITIONAL COMMENTS TO SUPPORT JD:**

Sec. III.B.1 Drainage Area. The drainage area of the tributary is undeterminable in this situation because it is a component of Syracuse City's storm water system and receives water from a variety of what would normally be thought of as drainage areas. What is relevant in this case is that the tributary flows year round (See Bloemen, March 4, 2019).

The post-Rapanos guidance uses the relevant reach concept to define the extent of a tributary. Relevant Reach is a term used in the *Approved Jurisdictional Determination Form and Instructional Guidebook* dated 30 May 2007. The instructions for how to determine the relevant reach match the post-Rapanos guidance memoranda's description of *tributary*: "tributary, for the purposes of this guidance, is the entire reach of the stream that is of the same order (i.e., from the point of confluence, where two lower order streams meet to form the tributary, downstream to the point such tributary enters a higher order stream)." See footnote 21 in the 5 June 2007 Rapanos Guidance (Grumbles & Woodley, 2007) and footnote 24 in the 2 December 2008 Rapanos Guidance (Grumbles & Woodley, 2008).

The relevant reach in this case is approximately three miles long ending where it discharges to the Great Salt Lake. For sake of this analysis we have ended the relevant reach at the meander line of the Great Salt Lake documented by USGS in 1966. However, the Great Salt Lake fluctuates substantially in area on an annual and multi-annual cyclical basis. When the lake is low the tributary is longer than when the lake is high. The lower one-third of the relevant reach is a open ditch and channalized stream while the upper two-thirds are encapsulated in underground pipes. This change from pipe to ditch, often referred to as "day-lighting", occurs at the intersection of W 1700 S and S 4000 W. The guidance on relevant reach is silent on how to treat tributaries that are encapsulated in pipes for the purposes of determining the extent of the relevant reach. Since the flow regime of the tributary is critical to this jurisdictional determination we have used the extent of perennial flow as our upper limit of the relevant reach, ending the relevant reach at the location where the Syracuse City Engineer indicated that perennial flow begins, at approximately 819 South 3000 West. During the course of this three miles, it joins no other stream of the same or larger stream order before reaching the Great Salt Lake making this three miles the relevant reach of the tributary for this analysis. At the points where the AJD Area 1 wetland contacts the relevant reach there is an ordinary high water mark in the culvert as evidenced by water staining, sediment deposits, and vegetation matted and bent. An ordinary high water mark is evident where the relevant reach day-lights into an open ditch as documented in SPK-1994-0037 and is evident from the fact that dry season aerial imagery shows water in the channel indicating perennial flow.

The relevant reach is perennial. Sec. III.D.4 instructs us to provide the rationale for why the relevant reach is perennial at Sec. III.D.2, however that assumes that the relevant reach is within the review area. In this case the relevant reach is not in the review area and so we have provided the necessary rationale here. The relevant reach abuts (touches) the AJD Area 1 wetland at the location of three culverts (see enclosed map titled Waters of the U.S. within the AJD Area 1 Review Area). At the point of this contact, the relevant reach is a 30-inch reinforced concrete pipe which is part of the Syracuse City storm water system. (Bloemen, 2018). The map provided by Syracuse City shows a major storm drain (30-inch reinforced concrete pipe with a slope of 0.10%) that flows south along the west side of the review area (along South 3000 West), to West 1700 South. Subsequent correspondence with the Syracuse City Engineer revealed that the relevant reach flows year round supported by a field drain upstream of the review area (Bloemen, 2019). Year round flow is corroborated by USACE staff who observed (both visual and audible) flow through the relevant reach at the intersection of S 3000W and W 1700S, just downstream of the AJD Area 1 on July 5, 2017. On October 10, 2018, USACE staff again observed the sound of water flowing from the Area 1 wetland into the relevant reach.

## MEMORANDUM FOR RECORD

SUBJECT: Reconsideration and New Approved Jurisdictional Determination in Response to the 13 November 2018 Administrative Appeal Remand, SPK-2007-01985, AJD Area 2

1. PURPOSE. The purpose of this memorandum for record is to serve as the basis for the Sacramento District's jurisdictional determination as required by 33 CFR §331.2. This memorandum, documents the approved jurisdictional determination for AJD Area 2. See also the accompanying detailed analysis in *Jurisdiction Analysis, AJD Area 2, SPK-2007-01985, Davis County, Utah*, for a detailed analysis (Robb, 2020). AJD Area 1 is addressed in a separate approved jurisdictional determination.

2. AUTHORITY. The authority to determine Clean Water Act jurisdiction is delegated to the District Engineer by 33 CFR §325.9 ([51 Fed. Reg. 41245, 13 November 1986](#)). In the Sacramento District, an approved jurisdictional determination reconsidering a determination that was the subject of an administrative appeal remand is subsequently delegated to the Wetlands Specialist. (Sacramento District, 2016).

## 3. REFERENCES.

- a. Grumbles, B. H., & Woodley, J. P. (2007, June 5). Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States*. Washington, D.C.
- b. Grumbles, B. H., & Woodley, J. P. (2008, December 2). Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States*. Washington, D.C.
- c. HDR Engineering. (2017). *Technical Memorandum 28: Aquatic Resource Delineation Report in support of the Environmental Impact Statement, West Davis Corridor Project, revised July 2017*. Salt Lake City.
- d. Robb, J. T. (2020, January 9). *Jurisdiction Analysis, AJD Area 2, SPK-2007-01985, Davis County, Utah*. Sacramento District, U.S. Army Corps of Engineers.
- e. Sacramento District. (2016, September 22). 12910-SPK Delegation of Signature Authority for Regulatory Division Products. *USACE QMS*. South Pacific Division, U.S. Army Corps of Engineers.
- f. USACE and EPA. (2007, May 30). *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook*. Washington, D.C.: U.S. Army Corps of Engineers.

4. BACKGROUND. The Sacramento District (District) completed an Approved Jurisdictional Determination on 4 August 2017. The Proponent appealed this jurisdictional determination to the South Pacific Division (SPD) on 3 October 2017. SPD, finding that the appeal had merit, remanded the jurisdictional determination back to the District for reconsideration on 13 November 2018. Following conversations concerning options pursuant to Regulatory Guidance Letter 16-01, the Proponent informed the District via email dated 24 January 2019 that they wished to proceed with approved jurisdictional determinations in two areas: AJD Area 1 and AJD Area 2. AJD Area 1 contains a single contiguous wetland composed of two mapped polygons labeled 08-IW-26A and 08-IW-26B (latitude 41.0922°, longitude -112.0830°). AJD Area 2 contains a single wetland composed of mapped polygons labeled 12-IW-58A, 12-IW-58B, and 12-IW-59 (latitude 41.073°, longitude -112.069°). These were the two wetlands specifically at issue in the administrative appeal. The remaining aquatic resources included in the 4 August 2017 Approved Jurisdictional Determination were not the subject of appeal and therefore are not reconsidered here.

5. REASON FOR REMAND. The 4 August 2017 approved jurisdictional determination asserted that the AJD Area 2 wetland was adjacent to the Great Salt Lake, a traditional navigable water pursuant to 33 CFR §328.3(a)(1), because its proximity was reasonably close to the Great Salt Lake, supporting the science-based inference that such wetlands have an ecological interconnection with jurisdictional waters pursuant to the guidance on the meaning of adjacency contained in the 2008 memorandum (Grumbles & Woodley, 2008). The 13 November 2018 appeal decision disagreed with the district's interpretation that the reasonably close proximity of the AJD Area 2 wetland to the Great Salt Lake inferred an ecological connection making a specific evaluation unnecessary, interpreting instead that the guidance required a species specific assessment to demonstrate the ecological connection. A species specific assessment pursuant to the 13 November 2018 appeal decision would require a study of species utilization that does not currently exist and would require considerable resources and time to complete. The 4 August 2017 approved jurisdictional determination did not fully evaluate adjacency by either of the two other criteria in the 2008 guidance.<sup>1</sup> Nor did it evaluate impoundments of waters otherwise defined as waters of the United States within the meaning of 33 CFR §328.3(a)(4) or if the AJD Area 2 wetland is adjacent to a tributary to the Great Salt Lake.

6. REGULATION VERSION. This jurisdictional determination evaluates the AJD Area 2 wetland under the re-codification of the 1986 definition of waters of the U.S. ([51 Fed. Reg. 41206-41260, 13 November 1986 re-codified in 84 Fed. Reg. 56626-56671, 22 October 2019](#)) and associated guidance.

7. APPLICABILITY OF POST-RAPANOS GUIDANCE. The post-*Rapanos* guidance does not apply to this circumstance.<sup>2</sup> As discussed in footnote 17 of the 2 December 2008

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<sup>1</sup> Although there was some evidence of a hydrologic connection in the administrative record in an MFR dated 25 July 2017.

<sup>2</sup> Post-*Rapanos* guidance includes both the 2007 and 2008 guidance memoranda (Grumbles & Woodley, 2007; Grumbles & Woodley, 2008) and the Approved Jurisdictional Determination Form and the accompanying guidebook (USACE and EPA, 2007).

guidance (Grumbles & Woodley, 2008), the post-*Rapanos* guidance may not apply to a particular situation. Impoundments pursuant to 33 §328.3(a)(4) are not among the listed provisions affected by *Rapanos* according to footnote 18, which goes on to state that the guidance does not address or affect other subparts of the agencies regulations beyond those listed. (Grumbles & Woodley, 2008). Additionally, by the time the court decided *Rapanos v. U.S.*, 547 U.S. 715 (S. Ct. 19 June 2006) the tributary to which the AJD Area 2 wetland drains had already been impounded to the point that the contribution of flow below the impoundments was fundamentally altered. See the impoundment discussion in Robb (2020).

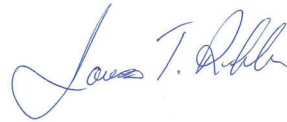
8. FORMAT. This memorandum is the basis for jurisdictional determination as required by 33 CFR §331.2 concerning whether AJD Area 2 is a wetland adjacent to an impoundment of a water otherwise defined as a water of the United States pursuant to 33 CFR §328.3(a)(4). The approved jurisdictional determination form and accompanying instructional guidebook are inapplicable to this determination, as they are focused on tributaries of those waters identified at 33 CFR §328.3(a)(1) (commonly referred to as traditional navigable waters) and wetlands adjacent to those (a)(1) waters and their tributaries. These guidance were in response to *Rapanos v. U.S.* (S.Ct. 2006), a case where the (a)(4) waters and their tributaries and adjacent wetlands were not at issue. A review of the approved jurisdictional determination form<sup>3</sup> reveals its inapplicability in documenting wetlands adjacent to (a)(4) impoundments. While the form does include a place to indicate that there is an impoundment of jurisdictional waters in the review area at Section III.D.7, there is no place to document the rationale for this decision, nor is there any place to document an (a)(7) wetland adjacent to an (a)(4) impoundment. The form instructs the reader to “demonstrate that the water was created from waters of the U.S.” but provides no place to document that demonstration. There is no place to record a wetland adjacent to an (a)(4) water (Section III.B only addresses wetlands adjacent to traditional navigable waters and wetlands adjacent to tributaries to traditional navigable waters). Neither the Instructional Guidebook nor the form provide instruction on how to document a wetland within the review area which is adjacent to an impoundment outside of the review area, the specific situation at issue here. We have therefore determined that the form is inapplicable to this circumstance and proceeded with documentation via this memorandum.

9. CONCLUSION. The AJD Area 2 wetland is a water of the United States pursuant to 33 CFR §328.3(a)(7). The AJD Area 2 wetland is adjacent to an (a)(4) impoundment of a tributary to the Great Salt Lake. The Great Salt Lake is a traditional navigable water within the meaning of 33 CFR §328.3(a)(1). The AJD Area 2 wetland is adjacent to the (a)(4) impoundment by virtue of an unbroken surface or sub-surface hydrologic connection to the impoundment. Impoundment of the tributary occurred through a series of modifications over the course of many years with a critical change occurring between 1993 and 2002. After this time period, contribution of flow below the impoundments was fundamentally reduced due to impoundment. At the time impoundment occurred, tributaries pursuant to

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<sup>3</sup> This form was originally released in the U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook dated 30 May 2007. (USACE and EPA, 2007).

33 CFR §328.3(a)(5) included all waters that contribute flow to traditional navigable waters, including their headwaters. Impoundments of waters of the United States remain waters of the United States pursuant to 33 CFR §328.3(a)(4) even if the impoundment eliminated all contribution of flow below it. See report titled *Jurisdiction Analysis, AJD Area 2, SPK-2007-01985, Davis County, Utah*, for a detailed analysis (Robb, 2020).

A handwritten signature in blue ink that reads "James T. Robb". The signature is written in a cursive style with a large initial "J" and "R".

JAMES ROBB  
WETLANDS SPECIALIST