

**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): November 8, 2012**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, Kennecott - Magna area , SPK-2011-01244-UO**

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

State: **Utah** County/parish/borough: **Salt Lake** City: **Magna**  
Center coordinates of site (lat/long in degree decimal format): Lat. **40.7064°**, Long. **-112.1158°**  
Universal Transverse Mercator: **12 405736.75 4506767.57**

Name of nearest waterbody: **Utah Salt Lake Canal**

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

Name of watershed or Hydrologic Unit Code (HUC): **Jordan, Utah., 16020204**

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:

Field Determination. Date(s): **November 2, 2012**

**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: **N/A**

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

There **are and are not** "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: **2,055** linear feet, **10** wide, and/or **0.85** acres.

Wetlands: **4.91** 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**

<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.

**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 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: **33.2 square miles**

Drainage area: **33.2 Pick List**

Average annual rainfall: **20 inches**

Average annual snowfall: **58 inches**

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through **1** tributaries before entering TNW.

Project waters are **10-15** river miles from TNW.

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

Project waters are **2-5** 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 are within the State of Utah Only**

Identify flow route to TNW<sup>5</sup>: **Tributary flows east through the review area to a canal then flows north to the Great Salt Lake.**

Tributary stream order, if known: **unknown. irrigation canal from Utah Lake**

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

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

<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.

Tributary is:  Natural  
 Artificial (man-made). Explain: **This tributary is the Utah Salt Lake Canal. Flows are controlled from Utah Lake. However, the Canal does receive stormwater and may be influenced by groundwater so there tends to be water flowing year round.**  
 Manipulated (man-altered). Explain:

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

Average width: **5-10** feet  
 Average depth: **1-3** feet  
 Average side slopes: **Vertical (1:1 or less).**

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:

Presence of run/riffle/pool complexes. Explain: **No riffle pool complexes. Channel is an irrigation channel with banks formed and enhanced from sidecasting during channel maintenance.**

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): **1-2 %**

(c) Flow:

Tributary provides for: **Perennial**

Estimate average number of flow events in review area/year: **6-10**

Describe flow regime: **Flow is controlled from an irrigation diversion. Flows can increase due to some natural inputs from stormwater and groundwater. Controlled flow would be based on water rights operated by the canal company. At times during spring run off additional flow can be diverted to allowed to alter water levels in reservoirs.**

Other information on duration and volume: **None**

Surface flow is: **Confined.** Characteristics: **Surface flow is confined to the channel. Flooding is rare since the majority of the flows are controlled**

Subsurface flow: **Unknown.** Explain findings: **With the study area there is unlikely to be any subsurface flows based on the clay substrate. Other sections upstream and outside of the project area may have some subsurface flows.**

Dye (or other) test performed: **No dye test was performed**

Tributary has (check all that apply):

Bed and banks  
 OHWM<sup>6</sup> (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.<sup>7</sup> 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:**

<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.

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

Explain: **Water color was clear with no visible oils or water quality concerns.**

Identify specific pollutants, if known: **The channel flows adjacent to a large mining operation. There may be some effect from past or current operations but there is no direct discharge to this water.**

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

Riparian corridor. Characteristics (type, average width):

Wetland fringe. Characteristics: **Mesic shrubs and tress dominate the overstory. A mixture of tamerisk, Russian olive, Siberian elm, coyoye willow.**

Habitat for:

Federally Listed species. Explain findings:

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings: **Deer/ other wildlife trails were observed durin a site visit. Over the past few years this area was habitat for a few beavers that have since moved on.**

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: **4.91** acres

Wetland type. Explain: **Emergent and Scrub Shrub**

Wetland quality. Explain: **The wetland adajacent to the canal are likely supported by ground water and leakage from the canal. The wetlands abutting the canal provide a buffer to the water flowing in the canal and habitat.**

Project wetlands cross or serve as state boundaries. Explain: **No. Wetlands do not cross state boundaries.**

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: **Wetlands are likely inundated and saturated during the spring and early summer months. As the weather warms up wetlands adjacent to the canal dry up and the hydrology in the canal becomes more dependent on the release at the control structure from the irrigation company.**

Surface flow is: **Overland sheetflow**

Characteristics: **Wetland flow occurs over land and subsurface along the excavated banks of the canal.**

Subsurface flow: **Yes**. Explain findings: **Likley occurring through the banks of the canal.**

Dye (or other) test performed: **No dye 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: **A berm approximately 50 feet wide at the base separates the phragmites wetlands located in the holding cells and the wetlands and the Utah Salt Lake Canal.**

(d) Proximity (Relationship) to TNW

Project wetlands are **10-15** river miles from TNW.

Project waters are **2-5** aerial (straight) miles from TNW.

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

Estimate approximate location of wetland as within the **100 - 500-year** 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: **Color and water quality seem normal with no oil on the surface or current known water quality issues. Mining activities historically occur adjacent to the canal and wetlands. Some water quality may be influenced by these types of activities.**

Identify specific pollutants, if known: **None known. The mining operation is part of a closed system that does not discharge in to the canal.**

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

Riparian buffer. Characteristics (type, average width): **Scrub shrub and emergent. The width varies up to about 100 feet in width.**

Vegetation type/percent cover. Explain: **Mesic shrubs and tress dominate the overstory. A mixture of tamerisk, Russian olive, Siberian elm, coyoye willow.**

- Habitat for:
  - Federally Listed species. Explain findings:
  - Fish/spawn areas. Explain findings:
  - Other environmentally-sensitive species. Explain findings:
  - Aquatic/wildlife diversity. Explain findings: **Deer/ other wildlife trails were observed and over the past few years this area was habitat for a few beavers that have since moved on.**

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

All wetland(s) being considered in the cumulative analysis: **1**  
Approximately **19.73** 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>
(Storage Cells) No	<b>19.73</b>		

Summarize overall biological, chemical and physical functions being performed: **The 19.73 acre of wetland within the storage cells flow to the north into the Clarification Canal away from the Utah Salt Lake Canal. The storage cells were constructed as part of the Kennecott mining process and designed to detain water and release it to the Clarification Canal. The soil substrate in the area consists of clays that allow little to no water to infiltrate. In addition the grade directs water away towards the Clarification Canal which is part of Kennecott's facility and is maintained as an isolated closed loop water system that does not discharge to the Great Salt Lake. The Corps determined that the Clarification Canal is isolated July 2012 SPK-2012-01213-UO. This 19.73 acre wetland is dominated by phragmites and offers little habitat diversity. There does not seem to be a groundwater influence and the site appears to capture rainfall and retain it within the cell and on the ground surface due to the clay soils. Ponded water was only observed at the lowest point in the north east corner of the site near the Clarification Canal. A berm approximately 50 feet wide at the base separates the wetlands located in the holding cells and the wetlands and the Utah Salt Lake Canal. This berm appears to be constructed from grading work to create the cells and consists of lower permeable clays that are typically found in this area. There does not appear to be a connection to the waters south and east of these wetlands or any direct connection to the wetlands or the Utah Salt Lake Canal. Any large storm event that inundated the cells would be directed to the Clarification Canal and enter the closed loop system.**

**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: **19.73 acres of non-jurisdictional wetlands are situated at the bottom of the historic storage cells that were created to impound materials during shutdowns and upsets at the now decommissioned North Concentrator. The wetland area is contained by earthen dikes and is composed of low-permeability native materials and underlain by lacustrine clays. There is no flow inlet to the storage cells. This area receives water from only precipitation events. Water does discharge from the storage area to the Clarification Canal and isolated water. There is no physical, chemical, or biological connection between the storage cells and any jurisdictional water of the U.S. The Clarification Canal is part of a closed system managed by Kennecott as part of their mining operations and was determined to be isolated non-jurisdictional water in July 2012 under SPK-2012-01213-UO. The water from the storage cells and the Clarification Canal do not flow to the Great Salt Lake. The approximately 50 foot wide berm and lack of culverts between the storage cells and the Utah Salt Lake Canal prevent a physical and chemical connection between the two waters. The berms are likely constructed from a clay material that is present in the soil substrate throughout this area. The storage cells also have a low-permeability lacustrine clay substrate that reduces the potential for any surface water to infiltrate into the ground or flow to the Utah Salt Lake Canal. In addition, the applicant has indicated that there is no downward hydraulic gradient in this area that would allow for surface and groundwater interface. A review of the LIDAR indicates that there is no large change in elevation between the Utah Salt Lake Canal and the storage cells but there is 5 feet of elevation change down to the Clarification Canal supporting the observation that surface and likely groundwater flow from the storage area to the Clarification Canal. With regards to a biological connection between the wetlands and the storage cell the applicant believes that since there is a monoculture of phragmites with no open water areas the storage cells offer little in terms of habitat values. Habitat is higher in functions and services directly along the Salt Lake Canal where there is a presents of open water and animal paths were observed in the vegetation.**

**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: **Although flows in the Utah Salt Lake Canal can be adjusted based on the water needs of farmers along the canal, this canal also intercepts groundwater or receives surface runoff that maintains flows in the canal for the majority of the year. The exception occurring possibly during years of significant drought. The Utah Salt Lake Canal discharges to the Great Salt Lake.**  
 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: **2,055** linear feet **10** wide.  
 Other non-wetland waters: acres.  
Identify type(s) of waters: **RPW known as the Utah Salt Lake Canal**

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.

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: **Wetlands on the south side berm to the storage cells are directly abutting the Utah Salt Lake Canal and have**

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

**locations where water can flow from the wetlands to the canal or from the canal to the wetlands if there is flooding or an abundance of water flowing in the canal.**

- 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: **4.91** 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.

**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: **There is no physical, chemical, or biological connection between the storage cells and any jurisdictional water of the U.S. Surface flows from precipitation is contained within the cells and directed to the Clarification Canal. The Clarification Canal is part of a closed system managed by Kennecott as part of their mining operations and a was determined to be an isolated non-jurisdictional water in July 2012 under SPK-2012-01213-UO. The water from the storage cells and the Clarification Canal do not flow to the Great Salt Lake. The approximately 50 foot wide berm and lack of culverts between the storage cells and the Utah Salt Lake Canal prevent a physical and chemical connection between the two waters. The berms are likely**

<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.





\* There are no surface water flows between or from the storage cells as evidenced by the large berm surrounding the cells and the absence of any culverts between the cells and any other area outside of KUC's water management system. This physical barrier prevents chemical interactions between surface waters from different locations in the region.

\* The historic storage cells are underlain by native low-permeability lacustrine clays typical of this area that minimizes the potential for any surface water intermingling with ground water. Additionally, there is not a downward hydraulic gradient in this area that would allow the intermingling of surface and ground waters, and there is very little to no ponded water that could affect such a gradient.

\* KUC's water management activities are part of the "closed system" associated with the historic storage cells. If surface waters are present in these cells from precipitation events, that water is directed to the industrial process waters in the Clarification Canal.

\* Finally, the historic cells are about the same elevation as the lowest areas adjacent to the canal (see attached LIDAR map), thus there is not an elevation gradient that would support off-site flows from the historic cells to the Canal that carries excess Utah/Salt Lake Canal water to the East. In addition, the Clarification Canal lies 5' below the historic cell area supporting the KUC water management system and retention of those flows in the process water system.

#### **Biological Isolation**

The historic cells are also biologically isolated due to:

\* The historic cells are a monoculture of phragmites with no open water areas. As such, the area offers very little in terms of habitat.

\* There are no species that have life history requirements solely provided by the phragmites stands. Because the greater area has a mosaic of vegetation types (mesic shrublands intermingled with open herbaceous areas), that area (outside the historic storage cells) provides preferred habitat for local species. While some species may incidentally travel through the isolated cells, the cells do not provide effective habitat for local wildlife species.