

APPROVED JURISDICTIONAL DETERMINATION FORM  
U.S. Army Corps of Engineers

Dec. 24, 2013

**SECTION I: BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** Dec. 24, 2013

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Sacramento District, Kennecott Tailings, SPK-2009-01213-UO.  
Name of water being evaluated on this JD form: Playa Areas: W53-W79

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

State: UT County: Salt Lake City: Magna

Center coordinates of site (lat/long in degree decimal format): Lat: 40.753 **N**, Long: 112.0667 **W**

Universal Transverse Mercator: \_\_\_\_\_

Name of nearest waterbody: C-7 Ditch.

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

Name of watershed or Hydrologic Unit Code (HUC): 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. List other JDs: SPK-2009-01213 JD1, JD2, JD3, Jones Spring Area, Clarification Canal and Toe Ditch, Adamson Spring

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

Office (Desk) Determination. Date: December 24, 2013.

Field Determination. Date(s): September 6, 2011, November 22, 2010.

**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 \_\_\_\_\_ width (ft) and/or 86.59 acres.

Wetlands: 214.17 acres.

**c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, and Established by OHWM.**

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: \_\_\_\_\_.

<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.

**SECTION III: CWA ANALYSIS**

- A. TNWs AND WETLANDS ADJACENT TO TNWs – NOT APPLICABLE
- B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS – NOT APPLICABLE
- C. SIGNIFICANT NEXUS DETERMINATION – NOT APPLICABLE
- D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

**2. RPWs that flow directly or indirectly into TNWs.**

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide rationale indicating that tributary flows perennial: Kersey Creek, the C-7 Ditch, and the Brighton Drain are all channels that have water in them nearly year-round. According to information provided by the applicant (May 2012 delineation page 59) these features are perennial in nature and some even contain fish populations. Describe flow path to a TNW: Kersey Creek and the Brighton Drain all flow into the C-7 Ditch which flows into Lee Creek just north of Interstate-80, which flows into the Great Salt Lake. The features creat a clear surface water connection from the vegetated and unvegetated playa sections and the Great Salt Lake.

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

Tributary waters: \_\_\_\_\_ linear feet \_\_\_\_\_ width (ft).

Other non-wetland waters: **86.59** acres.

Identify type(s) of waters: Kersey Creek, Brighton Drain, and C-7 Ditch as well as non-wetland (<5% Vegetation) playa habitat.

**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 and non-wetland playa in the review area comprise a largely saline playa complex that are seasonally flooded. The soils in these areas are finely textured and retain water from precipitation events. This complex has a surface water connection with the RPWs listed above.

Provide acreage estimates for jurisdictional wetlands in the review area: 214.17 acres.

- 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): NOT APPLICABLE
- F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS: NOT APPLICABLE

**SECTION IV: DATA SOURCES.**

**A. SUPPORTING DATA. Data reviewed for JD (check all that apply):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: May 2012 wetland delineation.
- 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.
- U.S. Geological Survey map(s). Cite scale & quad name: Farnsworth Peak and Magna
- USDA Natural Resources Conservation Service Soil Survey. Citation: \_\_\_\_\_.
- National wetlands inventory map(s). Cite name: Included in May 2012 Wetland Delineation.
- State/Local wetland inventory map(s): \_\_\_\_\_
- FEMA/FIRM maps: \_\_\_\_\_.
- 100-year Floodplain Elevation is: \_\_\_\_\_ (National Geodectic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): \_\_\_\_\_  
or  Other (Name & Date): \_\_\_\_\_.
- Previous determination(s). File no. and date of response letter: SPK-2009-01213-UO dated February 9, 2010.
- Applicable/supporting case law: \_\_\_\_\_.
- Applicable/supporting scientific literature: \_\_\_\_\_.
- Other information (please specify): \_\_\_\_\_.

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** The study area for this jurisdictional determination is bordering the study area of the February 9, 2010 JD which determined that the wetlands and non-wetland waters were jurisdictional as RPWs and wetlands directly abutting RPWs. The 2010 JD also asserted jurisdiction over the Riter Canal and C-7 Ditch. The project area covered under this JD form are contiguous to the project area of the 2010 JD. The wetland and non-wetland waters within the new project site include vegetated and unvegetated (<5%) playas, ditches, and emergent wetlands (see attached Figure 8 dated July 6, 2011). These features comprise a larger wetland complex that is connected hydrologically after season precipitation and flow into the C7 Ditch which flows directly in to the Great Salt Lake, a TNW. All of the wetlands within this complex are adjacent to RPWs (unvegetated playa and/or ditches) that flow directly into one of the immediate tributaries of the C-7 ditch or into the C-7 ditch directly. The new study area includes 212.99 acres of wetlands and 86.58 acres of non-wetland waters.

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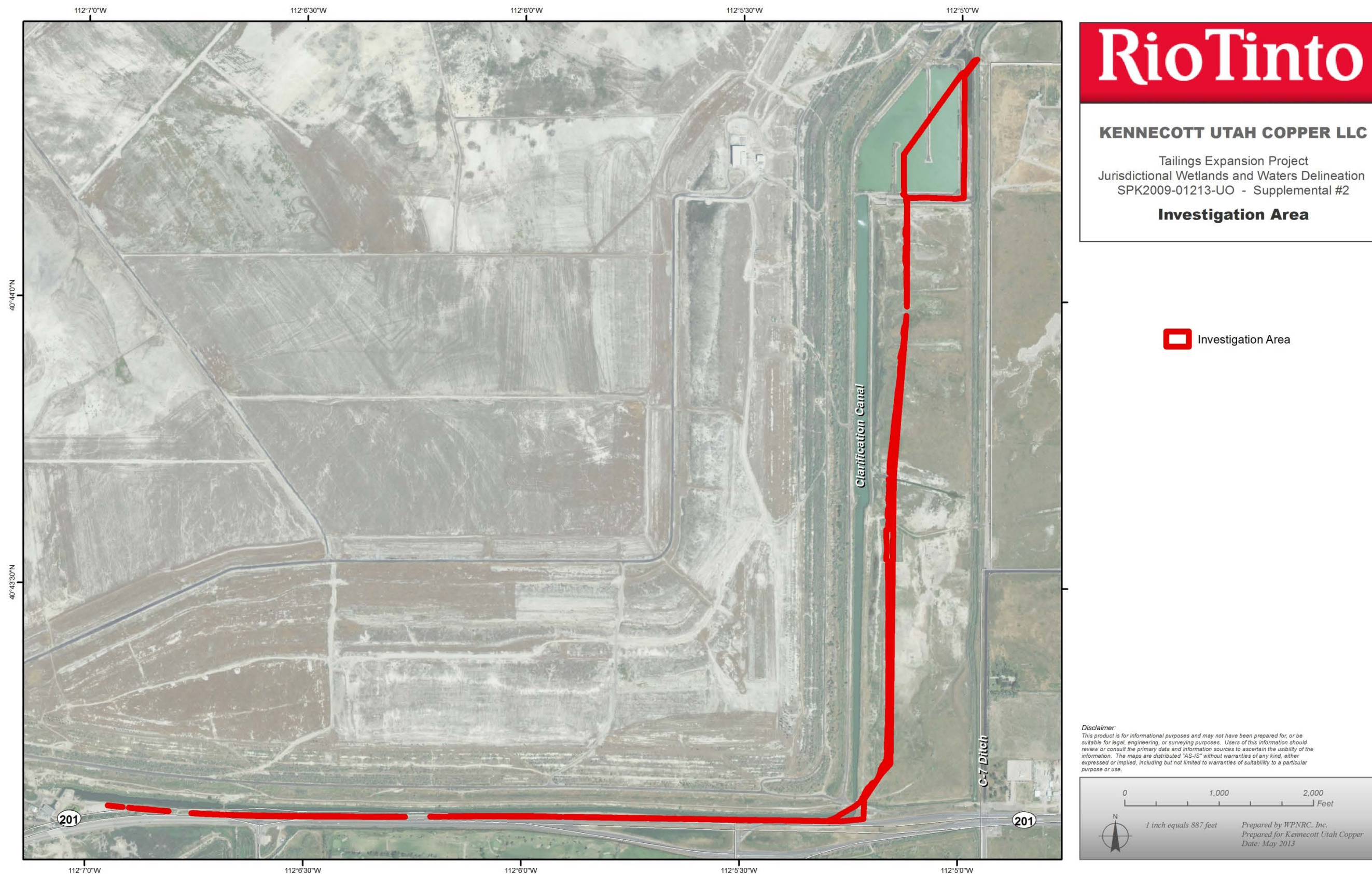
\* Update December 24, 2013: Kennecott submitted an updated wetland delineation on June 6, 2013. The updated delineation included an additional 16.56 acres of the proposed Tailings expansion facility. The additional area is a thin strip of land adjacent to the eastern and southern borders of the clarification canal. The jurisdictional wetlands and non-wetland waters are contiguous to the playa areas described in this form as approved in July 19, 2013. The additional area contains an additional 1.18 acres of wetland and <0.01-acre of non-wetland waters within the playa area. Acres on this form have been updated accordingly and reflect the total jurisdictional waters within the playa area.

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Other JD forms associated with this project area include JD1-3, which documents the jurisdiction for the February 9, 2012 JD; the Jones Spring Area, the Clarification Canal and Toe Ditch JD which documents that those features are constructed in man-made impoundments with artificial hydrology and thus non-jurisdictional; the Adamson Spring JD which was determined to be an isolated wetland.

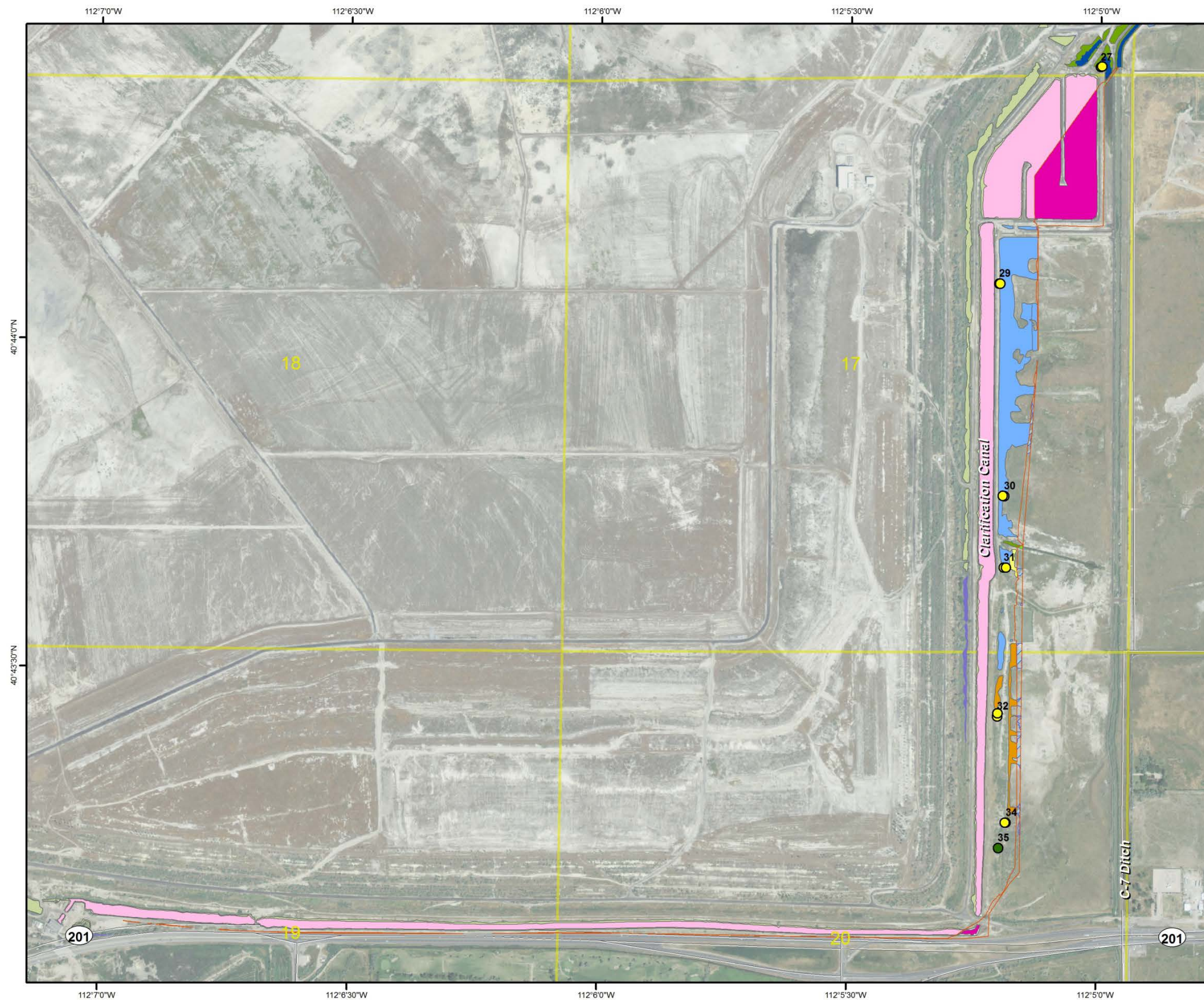


1.6. Figure 2: TEP Supplemental Delineation #2 Investigation Area





3.1.4. Figure 3: Vegetation Communities in TEP Supplemental Delineation #2 Investigation Area



**Rio Tinto**

**KENNECOTT UTAH COPPER LLC**

Tailings Expansion Project  
 Jurisdictional Wetlands and Waters Delineation  
 SPK2009-01213-UO - Supplemental #2

**Vegetation Types**

- Investigation Area
- Data Points**
- Upland and Wetland
- Upland Only
- Wetlands (Verified - SPK 2009-01213-UO)**
- Industrial Process Water (Non-Jurisdictional)
- Waters of the US (Jurisdictional)
- Emergent (Jurisdictional)
- Phragmites (Jurisdictional)
- Phragmites (Non-Jurisdictional)
- Tamarisk (Jurisdictional)
- Tamarisk (Non-Jurisdictional)
- Saline Playa (Jurisdictional)
- Wetlands (Non-Verified)**
- Industrial Process Water
- Phragmites (Non-Jurisdictional)
- Phragmites
- Emergent
- Open Water
- PLSS Section Lines

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0 1,000 2,000 Feet

1 inch equals 887 feet

Prepared by WPNRC, Inc.  
 Prepared for Kennecott Utah Copper  
 Date: May 2013



APPROVED JURISDICTIONAL DETERMINATION FORM  
U.S. Army Corps of Engineers

July 18, 2012

**SECTION I: BACKGROUND INFORMATION**

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Name of water being evaluated on this JD form: Playa Areas: W53-W79

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Universal Transverse Mercator: \_\_\_\_\_

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Name of watershed or Hydrologic Unit Code (HUC): 16020204.

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Wetlands: 212.99 acres.

**c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, and Established by OHWM.**

Elevation of established OHWM (if known): \_\_\_\_\_.

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- F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS: NOT APPLICABLE

**SECTION IV: DATA SOURCES.**

**A. SUPPORTING DATA. Data reviewed for JD (check all that apply):**

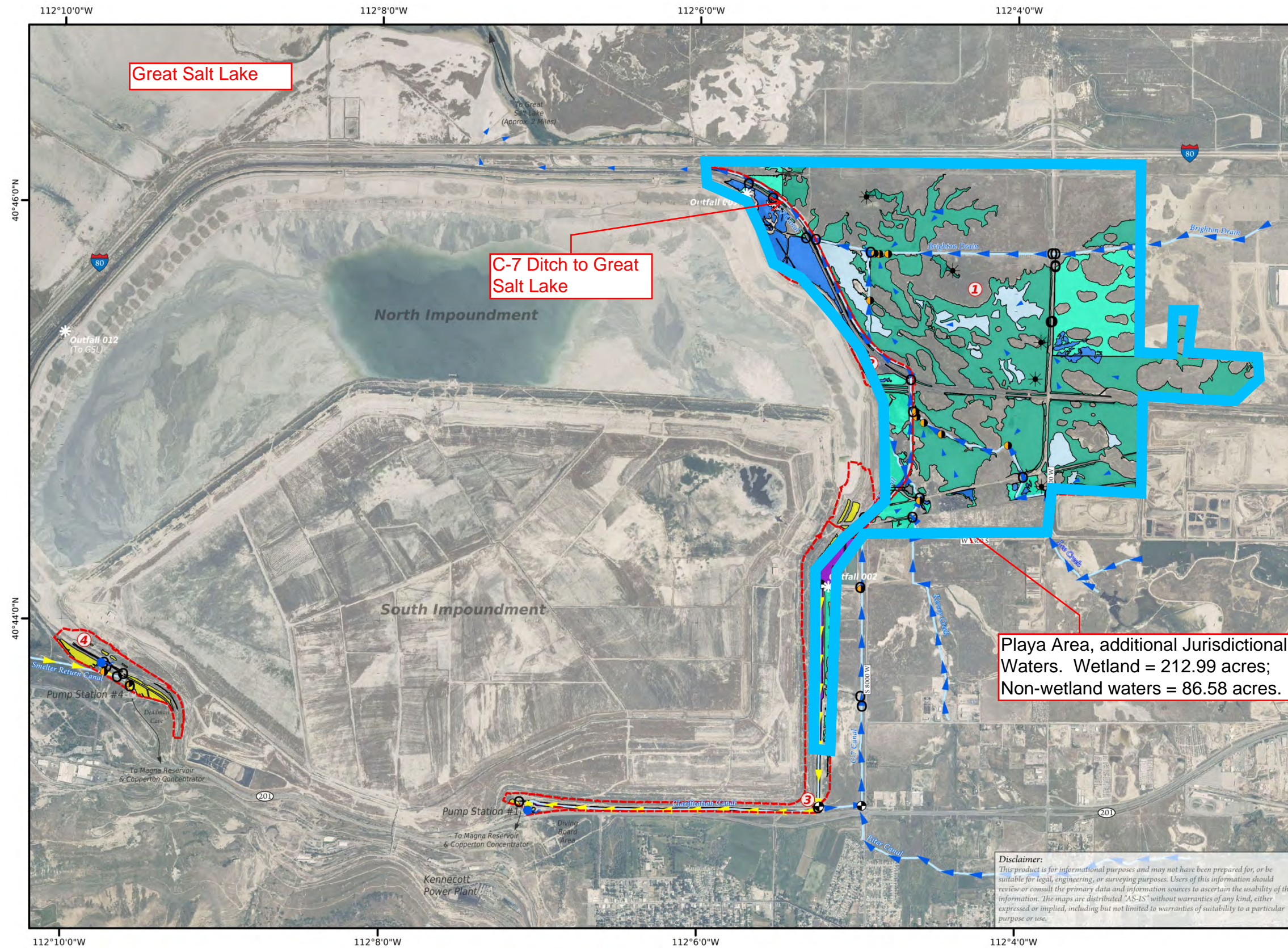
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- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - Office concurs with data sheets/delineation report.
  - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: \_\_\_\_\_.
- Corps navigable waters' study: \_\_\_\_\_.
- U.S. Geological Survey Hydrologic Atlas: \_\_\_\_\_.
- USGS NHD data.
- USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Farnsworth Peak and Magna
- USDA Natural Resources Conservation Service Soil Survey. Citation: \_\_\_\_\_.
- National wetlands inventory map(s). Cite name: Included in May 2012 Wetland Delineation.
- State/Local wetland inventory map(s): \_\_\_\_\_
- FEMA/FIRM maps: \_\_\_\_\_.
- 100-year Floodplain Elevation is: \_\_\_\_\_ (National Geodectic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): \_\_\_\_\_  
or  Other (Name & Date): \_\_\_\_\_.
- Previous determination(s). File no. and date of response letter: SPK-2009-01213-UO dated February 9, 2010.
- Applicable/supporting case law: \_\_\_\_\_.
- Applicable/supporting scientific literature: \_\_\_\_\_.
- Other information (please specify): \_\_\_\_\_.

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** The study area for this jurisdictional determination is bordering the study area of the February 9, 2010 JD which determined that the wetlands and non-wetland waters were jurisdictional as RPWs and wetlands directly abutting RPWs. The 2010 JD also asserted jurisdiction over the Riter Canal and C-7 Ditch. The project area covered under this JD form are contiguous to the project area of the 2010 JD. The wetland and non-wetland waters within the new project site include vegetated and unvegetated (<5%) playas, ditches, and emergent wetlands (see attached Figure 8 dated July 6, 2011). These features comprise a larger wetland complex that is connected hydrologically after season precipitation and flow into the C7 Ditch which flows directly in to the Great Salt Lake, a TNW. All of the wetlands within this complex are adjacent to RPWs (unvegetated playa and/or ditches) that flow directly into one of the immediate tributaries of the C-7 ditch or into the C-7 ditch directly. The new study area includes 212.99 acres of wetlands and 86.58 acres of non-wetland waters.

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Other JD forms associated with this project area include JD1-3, which documents the jurisdiction for the February 9, 2012 JD; the Jones Spring Area, the Clarification Canal and Toe Ditch JD which documents that those features are constructed in man-made impoundments with artificial hydrology and thus non-jurisdictional; the Adamson Spring JD which was determined to be an isolated wetland.





# RioTinto

**Kennecott Utah Copper LLC**  
**2011 Supplemental Jurisdictional Delineation**  
**FIGURE 8**  
 Water Management

- Analysis Area Boundary
- ① Playa Analysis Area
- ② Toe Ditch Road Analysis Area
- ③ Clarification Canal Analysis Area
- ④ Jones Spring Analysis Area
- Jurisdictional Wetland Based on 2010 JD
- Potential Jurisdictional Wetland Based on 2012 JD
- Potential Isolated Wetland Based on 2012 JD
- Waters of the U.S. Based on 2010 JD
- Potential Waters of the U.S. Based on 2012 JD
- Industrial Process Water
- Stream/Ditch
- Industrial Process Water
- Direction of Flow
- Culvert
- Headgate
- Breach
- Bridge
- Outfall
- Spring
- Agricultural Well

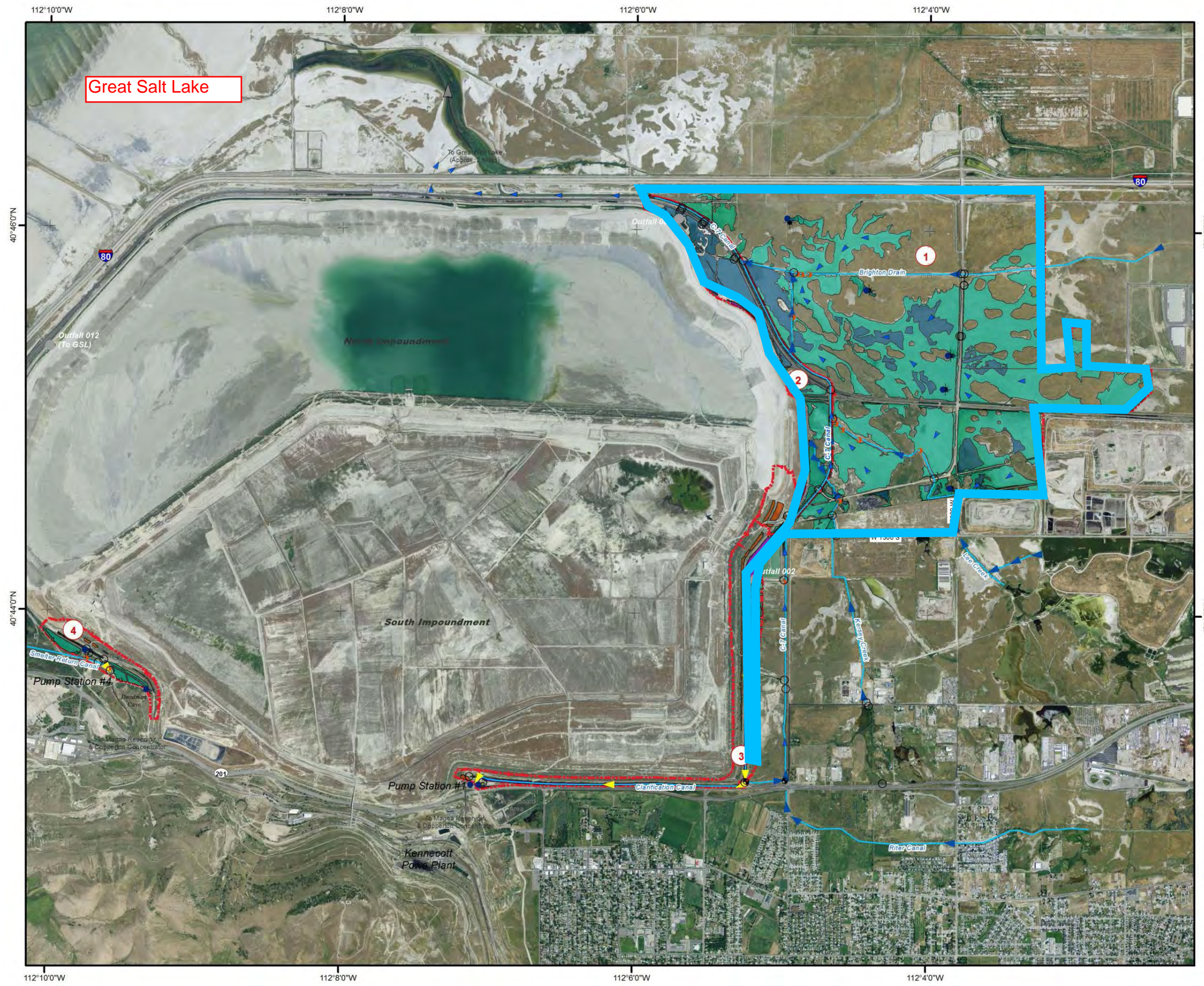
Playa Area, additional Jurisdictional Waters. Wetland = 212.99 acres; Non-wetland waters = 86.58 acres.

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0 1,500 3,000 6,000 Feet  
 Scale: 1" = 3,000'

Prepared By: WPNRC Inc.  
 Prepared For: Kennecott Utah Copper  
 Date: April 2011





**Kennecott Utah Copper LLC**

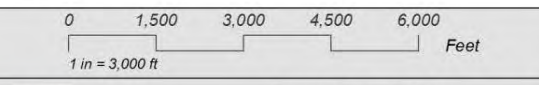
**2012 Supplemental  
Jurisdictional Delineation**

**Figure 8**

**Water Management**

- Analysis Area
- ① Playa Analysis Area
- ② Toe Ditch Road Analysis Area
- ③ Clarification Canal Analysis Area
- ④ Jones Spring Analysis Area
- Outfall
- Spring
- Culvert
- Breach
- Headgate
- Well Head
- Stream/Ditch
- Industrial Process Water
- Direction of Flow
- Jurisdictional Wetland
- Non-Jurisdictional Wetland
- Non Jurisdictional Water
- Waters of the US
- Industrial Process Water

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Prepared By: WPNRC Inc.  
Prepared For: Kennecott Utah Copper  
Date: April 2012