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): August 24, 2010

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, Kunzler/Fairview Farms Property, SPK-2009-01402-UO (non-abutting, adjacent wetlands: W-A, W-B, W-F, W-O, W-P, W-Q, W-R, W-S)

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **Utah** County/parish/borough: **Box Elder** City: **Willard**
Center coordinates of site (lat/long in degree decimal format): Lat. **41.437°**, Long. **-112.043°**
Universal Transverse Mercator: **12 412793.2 4587881.53**
Name of nearest waterbody: **Willard Bay**
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 Bear-Malad. Idaho, Utah., 16010204**
☒ 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: **Abutting RPW's: W-G, W-H, W-I, W-J, W-K, W-L, W-M, W-N**
Isolated's: W-C, W-D, W-E

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

☒ Office (Desk) Determination. Date: **16 June 2010**
☒ Field Determination. Date(s): **25 May 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): [1]

☐ TNWs, including territorial seas
☐ Wetlands adjacent to TNWs
☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
☐ Non-RPWs that flow directly or indirectly into TNWs
☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
☒ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
☐ Impoundments of jurisdictional waters
☐ Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet, wide, and/or acres.
Wetlands: **0.88** acres.

c. Limits (boundaries) of jurisdiction based on: **1987 Delineation Manual**
Elevation of established OHWM (if known):

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

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

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW
Identify TNW:

Summarize rationale supporting determination:

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

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

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

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

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

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size: **8-10 square miles**
Drainage area: **250 acres**
Average annual rainfall: **18** inches
Average annual snowfall: **30** inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☒ Tributary flows through **3** 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:

Identify flow route to TNW[5]: **Wetlands on property flow into abutting un-named ditches (RPW's) that flow westward, under railroad tracks (via culverts), under Interstate 15 (via culverts), into un-named ditches, into Willard Bay, into Great Salt Lake (TNW). Wetlands A, B, and F (located on the eastern parcel) are connected**

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

to RPW ditches via a small upland depressional route from the western end of each wetland and this flows to Wetland G complex during storm events or during spring snowmelt through surface sheet flow. Farming activities through these depressional areas are slowly filling in or changing these upland depressional routes. On the western parcel, Wetlands O, P, Q, R and S are connected to Wetland J at the north end of Wetland O via a headgate and culverts. There is approximately 25 feet of upland between this headgate and Wetland J. Wetland J flows north and west where they flow under Interstate 15 via culverts, continuing through unnamed ditches to Willard Bay.

Tributary stream order, if known:

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

Tributary is:
- ☐ Natural
- ☒ Artificial (man-made). Explain: **irrigation ditches that are fed by adjacent and abutting wetlands, artesian wells and natural springs.**
- ☐ Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):
- Average width: **3-4** feet
- Average depth: **1-2** feet
- Average side slopes: **2:1.**

Primary tributary substrate composition (check all that apply):

☒ Silts	☒ Sands	☐ Concrete
☐ Cobbles	☒ Gravel	☐ Muck
☐ Bedrock	☒ Vegetation. Type/% cover: **30-40**	
☐ Other. Explain:		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: **good**
Presence of run/riffle/pool complexes. Explain: **none**
Tributary geometry: **Relatively straight**
Tributary gradient (approximate average slope): **1-2** %

(c) Flow:

Tributary provides for: **Seasonal flow**
Estimate average number of flow events in review area/year: **1**
Describe flow regime:
Other information on duration and volume:

Surface flow is: **Overland sheetflow.** Characteristics: **during storm events and spring snowmelt, water flows from one wetland to another or to the interconnecting ditches.**

Subsurface flow: **Unknown**. Explain findings:
- ☐ Dye (or other) test performed:

Tributary has (check all that apply):
- ☒ Bed and banks
- ☐ OHWM[6] (check all indicators that apply):

☒ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☐ shelving	☐ the presence of wrack line
☐ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☐ sediment deposition	☒ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

- ☐ Discontinuous OHWM.[7] Explain:

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

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

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

☐ other (list):

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: **water color is relatively clear and flows continously.**
Identify specific pollutants, if known:

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

☐ Riparian corridor. Characteristics (type, average width):
☒ Wetland fringe. Characteristics: **the ditches have wetland characteristics (soil, vegetation and hydrology) and have directly abutting wetlands.**
☐ 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: **W-A: 0.073, W-B: 0.271, W-F: 0.119, W-O: 0.143, W-P: 0.032, W-Q: 0.015, W-R: 0.146, W-S: 0.077** acres
Wetland type. Explain: **W-A is wet meadow, W-B is emergent marsh and forested marsh, W-F is emergent marsh, W's-O, P, Q, R and S are all wet meadow.**
Wetland quality. Explain: **W-A is low quality as a result of continuing farming within it, W-B and W-F have high quality functions and services. W-B has a good diversity of willow growth with a natural spring at the upper (eastern) end of the complex with a continual flow. W-F has a natural spring at the upper (eastern) end of the habitat with a continual flow. W-A, W-B and W-F all had standing water in the complexes with a large quantity of duck weed growing. Water is relatively clear with springs feeding W-B and W-F. W- O, P, Q, R and S are all medium functioning wetlands that act to convey and filter water as opposed to holding water.**
Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:
Flow is: **Perennial flow**. Explain: **Flow aapears to be year round from nautral springs and groundwater discharge. There are artesian wells within the project site as well.**

Surface flow is**: Overland sheetflow**
Characteristics: **During storm water events Wetlands A, B and F have waters that flow over and through the wetlands westward connecting to Wetland G via a small depressional corridor. The two wetlands (B and F) that contain springs have a continual flow that moves westward to Wetland G by surface sheet flow during storm events and spring snowmelt. However, the flows from the springs do not provide year round connectivity by themselves and percolate into the upland swales prior to reaching Wetland G during dry months. Wetland's O, P, Q, R and S have defined bed and banks and convey water from the west side of the railroad tracks to the large Wetland J.**

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: **Wetlands O, P, Q, R and S have distinct channels with defined bed and banks and visually flow to Wetland J.**
- ☐ Ecological connection. Explain:
- ☒ Separated by berm/barrier. Explain: **W-A, W-B and W-F have slight upland depressions leading westward into W-G (an abutting wetland to a RPW). Sometime between the October 2009 site visit and the May 2010 site visit, a dirt road had been built that bisected the connectivity of these wetlands to W-G. This road is not related to this project. Before the road was built, the depressional connectivity was observed and distinct.**

(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 **50 - 100-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: **W-A, W-B and W-F all had standing water in them with a large quantity of duck weed growing. Water is relatively clear with springs feeding W-B and W-F. Wetlands O, P, Q, R and S all had moving water in them that was relatively clear as a result of no cattle on the land nor agricultural activity occurring. During periods of these activities the water would be discolored as a result of runoff from these activities.**
Identify specific pollutants, if known: **Pollutants are in the form of agricultural and livestock runoff.**

(iii) Biological Characteristics. Wetland supports (check all that apply):
☒ Riparian buffer. Characteristics (type, average width): **W-B had a good diversity of willow growth from saplings to trees as tall as 30 feet.**
☐ Vegetation type/percent cover. Explain:
☒ Habitat for:
☐ Federally Listed species. Explain findings:
☐ Fish/spawn areas. Explain findings:
☐ Other environmentally-sensitive species. Explain findings:
☒ Aquatic/wildlife diversity. Explain findings: **W-B had a diversity of song birds while conducting the site visits. Unidentified frog species were also noted within the waters.**

3. Characteristics of all wetlands adjacent to the tributary (if any)
All wetland(s) being considered in the cumulative analysis: **15-20**
Approximately **39.216** acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)		Size (in acres)	Directly abuts? (Y/N)		Size (in acres)
W-A	**N**	**0.073**	**W-B**	**N**	**0.271**
W-F	**N**	**0.119**	**W-G**	**Y**	**8.645**
W-H	**Y**	**7.507**	**W-I**	**Y**	**0.835**
W-J	**Y**	**21.055**	**W-K**	**Y**	**0.043**
W-L	**Y**	**0.149**	**W-M**	**Y**	**0.018**
W-N	**Y**	**0.088**	**W-O**	**N**	**0.143**
W-P	**N**	**0.032**	**W-Q**	**N**	**0.015**
W-R	**N**	**0.146**	**W-S**	**N**	**0.077**

Summarize overall biological, chemical and physical functions being performed: **W-A is low of quality as a result of continuing farming within it, W-B and W-F have high quality functions and services such as providing riparian habitat for numerous avian species, allowing for groundwater recharge, sediment retention and nutrient removal. W-B and W-F both have active springs at the eastern end that conveys to the west and eventually dissipating into the earth. These wetlands also collect storm water. As a result of the associated western swales of these wetlands gradually disappearing before reaching W-G, the water is allowed to re-infiltrate the ground thereby recharging the ground water, retaining the sediment and agricultural pollutants and other nutrients. W-B has a good diversity of willow growth with a natural spring at the upper (eastern) end of the complex with a continual flow. W-F has a natural spring at the upper (eastern) end of the habitat with a continual flow. W's-O, P, Q, R and S are all medium functioning wetlands that act to convey and filter water as opposed to retaining/detaining flows. W-A, W-B and W-F all had standing water in them with a large quantity of duck weed growing. Water is relatively clear with springs feeding W-B and W-F. Wetlands O, P, Q, R and S all had moving water in them that was relatively clear as a result of no cattle on the land nor agricultural activity occurring. During periods of these activities the water would be discolored as a result of runoff from these activities. W-B had a good diversity of willow growth from saplings to trees as tall as 30 feet. W-B had a diversity of song birds while conducting the site visits. Unidentified frog species were also noted within the waters.**

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: **W-A is low of quality as a result of continuing farming within it, W-B and W-F have high quality functions and services such as providing riparian habitat for numerous avian species, allowing for groundwater recharge, sediment retention and nutrient removal. W-B and W-F both have active springs at the eastern end that conveys to the west and eventually dissipating into the earth. These wetlands also collect storm water. As a result of the associated western swales of these wetlands gradually disappearing before reaching W-G, the water is allowed to re-infiltrate the ground thereby recharging the ground water, retaining the sediment and agricultural pollutants and other nutrients. W-B has a good diversity of willow growth with a natural spring at the upper (eastern) end of the complex with a continual flow. W-F has a natural spring at the upper (eastern) end of the habitat with a continual flow. W's-O, P, Q, R and S are all medium functioning wetlands that act to convey and filter water as opposed to retaining/detaining flows. W-A, W-B and W-F all had standing water in them with a large quantity of duck weed growing. Water is relatively clear with springs feeding W-B and W-F. Wetlands O, P, Q, R and S all had moving water in them that was relatively clear as a result of no cattle on the land nor agricultural activity occurring. During periods of these activities the water would be discolored as a result of runoff from these activities. W-B had a good diversity of willow growth from saplings to trees as tall as 30 feet. W-B had a diversity of song birds while conducting the site visits. Unidentified frog species were also noted within the waters.**

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:
   - ☐ 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[8] that flow directly or indirectly into TNWs.**
   - ☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

[8]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:

☐ 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: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.
☒ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **0.88** 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.[9]
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ 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.

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

☐ 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: **Kagel Environmental**
☒ 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: **1:24K; UT-WILLARD**
☒ USDA Natural Resources Conservation Service Soil Survey. Citation: **Web Soil Survey**
☒ National wetlands inventory map(s). Cite name: **USFWS Website**
☐ 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:
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☐ Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Adjacent RPW Wetlands W-A, W-B, W-F, W-O, W-P, W-Q, W-R, W-S (Total Acres: 0.876):

Wetlands on property flow into abutting RPW un-named ditches that flow westward, under railroad tracks (via culverts), under Interstate 15 (via culverts), into un-named ditches, into Willard Bay, into Great Salt Lake (TNW).

On the eastern parcel, Wetlands A, B, and F are connected to RPW ditches via Wetland G and small upland depressional routes from the western end of each wetland that flow to Wetland G complex during storm and spring snowmelt events. Farming activities through these depressional areas are slowly filling in or changing these upland depressional routes.

On the western parcel, Wetlands O, P, Q, R and S are connected to Wetland J at the north end of Wetland O via a head gate and culverts. There is approximately 25 feet of upland between this head gate and Wetland J. Wetland J flows north and west where they flow under Interstate 15 via culverts, continuing through unnamed ditches to Willard Bay. Irrigation ditches are fed by adjacent and abutting wetlands, artesian wells and natural springs. During storm events and spring meltoff, waters flow from one wetland to another or to the interconnecting ditches. Water color is relatively clear and flows continuously. The ditches have wetland characteristics (soil, vegetation and hydrology) and have directly abutting wetlands. W-A is wet meadow, W-B is emergent marsh and forested marsh, W-F is emergent marsh, W's-O. P, Q, R and S are all wet meadow. W-A is low of quality as a result of continuing farming within it, W-B and W-F have high quality functions and services such as providing riparian habitat for numerous avian species, allowing for groundwater recharge, sediment retention and nutrient removal. W-B and W-F both have

active springs at the eastern end that conveys to the west and eventually dissipating into the earth. These wetlands also collect storm water. As a result of the associated western swales of these wetlands gradually disappearing before reaching W-G, the water is allowed to re-infiltrate the ground thereby recharging the ground water, retaining the sediment and agricultural pollutants and other nutrients. W-B has a good diversity of willow growth with a natural spring at the upper (eastern) end of the complex with a continual flow. W-F has a natural spring at the upper (eastern) end of the wetland with a continual flow. W-A, W-B and W-F all had standing water in the complexes with a large quantity of duck weed growing. Water is relatively clear with springs feeding W-B and W-F. W's O, P, Q, R and S are all medium functioning wetlands that act to convey and filter water as opposed to detaining/retaining flows. During storm events Wetlands A, B and F have waters that flow over and through the wetlands westward connecting to Wetland G via a small depressional corridor. The two wetlands (B and F) that have springs have a continual flow that moves westward to connect with Wetland G either by surface water during storm events or via ground surface. Wetland's O, P, Q, R and S have defined bed and banks. W-A, W-B and W-F have slight depressions leading westward into W-G (an abutting wetland to a RPW). Sometime between the October 2009 site visit and the May 2010 site visit, a dirt road had been built that bisected the connectivity of these wetlands to W-G. This road is not related to this project. Before the road was built, the depressional connectivity was observant and distinct. Wetlands O, P, Q, R and S have distinct channelization with defined bed and banks obviously flowing to Wetland J. W-A, W-B and W-F all had standing water in them with a large quantity of duck weed growing. Water is relatively clear with springs feeding W-B and W-F. Wetlands O, P, Q, R and S all had moving water in them that was relatively clear as a result of no cattle on the land nor agricultural activity occurring. During periods of these activities the water would be discolored as a result of runoff from these activities. W-B had a good diversity of willow growth from saplings to trees as tall as 30 feet. W-B had a diversity of song birds while conducting the site visits. Unidentified frog species were also noted within the waters.

Site Related Abutting RPW Wetlands W-G, W-H, W-I, W-J, W-K, W-L, W-M, W-N (Total Acres: 38.34):

A site visit was conducted in November and May and both times the ditches had moving/standing water in them. To the east of the project location is a steep mountain range approximately one mile away. Waters flow off of these mountains and through the project area accumulating in the wetlands and ditches troughout the property. These ditches then travel west under Interstate 15 (via culverts) and into the Great Salt Lake via Willard Bay. There are numerous springs throughout the project property that are also contributing to these wetlands and ditches. All the wetlands are abutting another wetland, a ditch or are the waterway themselves and are all interconnected through ditches that lead to the Great Salt Lake. There were two site visits (November and May) conducted and all the waterways interconnecting these wetlands had flowing water in them both visits.

Site Related Isolated Wetlands W-C, W-D, W-E (Total Acres: 0.05):

Wetlands C and D are east and upgradient about 2 feet over a 140 foot length from Wetland B. This is very flat agricultural land. They are also segregated from Wetland B by a non-functioning ditch that was dry on both site visits in the Spring and the Fall and did not show any other indicators to meet the three parametes of a wetland. This ditch runs north and south and any water that would sheet flow from these two wetlands would be captured by this ditch and taken away from Wetland B. Wetland E is east and upgradient about 12 feet over a 1000 foot distance from wetland G. All three of these wetlands are surrounded on all sides by very flat agricultural land. There were no signs of sheetflow or other water markings of moving water or Ordinary High Water Marks of connectivity to other waters of the U.S.