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): September 21, 2017

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, **SR 68; I-215 to Center St.**, **SPK-2017-00621-UO**

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **Utah** County/parish/borough: **Davis County** City: **North Salt Lake**
Center coordinates of site (lat/long in degree decimal format): Lat. **40.8350**°, Long. **-111.9359**°
Universal Transverse Mercator: **12 421090.09 4520866.66**
Name of nearest waterbody: **Jordan River**
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, 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: **September 21, 2017**
☒ Field Determination. Date(s): **August 14, 2017 and August 24, 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): [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: 9.15 acres
Non-wetland waters: **7,421** linear feet, **20** feet wide, or **5.23** acres.
Wetlands: **3.92** acres.

c. Limits (boundaries) of jurisdiction based on: **1987 Manual for Wetlands and Ordinary High Water Mark for Non-Wetland Waters**
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: **Wetland WA006 (0.12 acre) was determined to be a result of a leaking pipe and is therefore a non-jurisdictional feature.**

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

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

1. **TNW**
   Identify TNW:

   Summarize rationale supporting determination:

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

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

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

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

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

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

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

   (i) General Area Conditions:
   Watershed size: **813 square miles**
   Drainage area: **2,207 acres**
   Average annual rainfall: **22** inches
   Average annual snowfall: **22** 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 **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:

   Identify flow route to TNW[5]: **Tributary (also known as the "Sewage Canal") crosses below the Jordan River (approximately 1,000 feet from the project area, and continues to the Great Salt Lake, which is approximately 4 river miles from the project. The tributary system consists of two main branches North Canyon Canal and Oil Drain Canal) that run through the project area and converge at the project area's west end, at a location approximately 300 feet east of where the tributary is piped below the Jordan River. One perennial branch of the tributary follows next to the northern project**

[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.

boundary (North Canyon Canal) and the other perennial branch of the tributary (Oil Drain Canal) follows next to the southern project boundary. These two perennial branches of the tributary formerly came together in the center of the project area at the location where the majority of wetlands under review here are located, and the wetlands under review directly abutted the tributary system prior to the mid-1970s. Drainage configuration changes associated with construction of the interchange moved the main branches to their current configuration, and the subject wetlands no longer are directly-abutting, but now lie between the two reconfigured tributaries, just upstream of the new point of convergence.

An ephemeral tributary (East Ditch) is also considered here. The East Ditch is an ephemeral tributary to the North Canyon Canal. The features contains hydrophytic vegetation and ordinary high water mark, and substantial flow was observed in the feature on September 19, 2017.

Tributary stream order, if known:

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

Tributary is:
- ☐ Natural
- ☐ Artificial (man-made). Explain:
- ☒ Manipulated (man-altered). Explain: **The portions of the canals within the project area likely are historic drainages that have been extensively modified. Downstream of the project area, the canal likely was excavated in a mix of upland and wetland areas, transitioning to mudflat in proximity to the Great Salt Lake.**

Tributary properties with respect to top of bank (estimate):
- Average width: 20 feet
- Average depth: 5-10 feet
- Average side slopes: **2:1**

Primary tributary substrate composition (check all that apply):

☐ Silts	☐ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☒ Other. Explain: **Unknown. Likely silt and muck.**		

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

Presence of run/riffle/pool complexes. No. Explain: This is an excavated canal and is relatively uniform in width, slope, and substrate.

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): **<2%**

(c) Flow:

Tributary provides for: **Perennial**

Estimate average number of flow events in review area/year: **1**

Describe flow regime: **The main canal and the two upstream canals are all perennial**

Other information on duration and volume:

Surface flow is: **Discrete and confined.** Characteristics: **Open water, Substantial Flow in August**

Subsurface flow: **Unknown**. Explain findings: **Subsurface flow was not directly observed, but is likely, given landscape position, topography, and regional groundwater flow patterns.**

☐ 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

[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.

☐ 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:
- ☐ 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: **Water in the canals was generally clear, with a slightly foul odor at times.**

Identify specific pollutants, if known:

(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: **Fish, amphibians, and birds were observed during the site visit.**

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General: **Wetlands 4 and 5 are connected to Wetlands 1, 2, and 3 by culverts located under I-215. Water marks and sediment deposits on the culverts indicate regular connection of these wetlands to one another. Wetlands 1, 2, and 3 are within 300 feet of the North Canyon Canal, and appear to be connected to the North Canyon Canal by culverts that can route flows during high water events. Wetland 7 abuts a perennial tributary to the North Canyon Canal.**

Wetland size: **3.91** acres
Wetland type. **Palustrine Emergent Marsh (PEM)** Explain: **Saline wet meadows**
Wetland quality. **Moderate** Explain: **Vegetation cover is dominated by desirable hydrophytic vegetation (*Distichlis spicata*, *Suaeda* spp., *Salicornia* spp., and *Allenrolfea* sp.). Hydrology is derived partially from highway runoff.**

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:
Flow is: **Ephemeral flow**. Explain:

Surface flow is**: Confined**
Characteristics: **Occasional flows through culverts**

Subsurface flow: **Unknown**. Explain findings: **Subsurface flow is likely, given regional drainage pattern, depressional landscape position, and proximity to non-TNW.**
☐ Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:
☒ Directly abutting **(Wetland 7)**
☒ Not directly abutting **(Wetlands 1a, 1b, 1c, 2, 3, and 4)**
- ☒ Discrete wetland hydrologic connection. Explain: **All of these wetlands are connected to North Canyon Canal by at least one (likely two) culvert systems (see Figure 1).**
- ☒ Ecological connection. Explain: **These wetlands are adjacent to a relatively permanent tributary (Sewage Canal, including the North Canyon and Oil Drain Canals) of the Great Salt Lake. Considering the flow characteristics and functions of these tributaries, together with the functions performed by the subject wetlands and similarly situated wetlands these aquatic resources collectively have a significant nexus to the Great Salt Lake.**

[7] Ibid.

The ecological relationship between tributaries and their adjacent wetlands is well-documented in the scientific literature and reflects their physical proximity as well as shared hydrological and biological characteristics. The duration, frequency, and volume of flow in these tributaries, and subsequently the flow in downstream navigable waters, is directly affected by the presence of adjacent wetlands that hold floodwaters, intercept sheet flow from uplands, and then release waters to tributaries in a more even and constant manner. These adjacent wetlands, along with similarly situated wetlands, trap and hold pollutants that may otherwise reach tributaries including sediments, chemicals, and other pollutants. These tributaries and their adjacent wetlands provide habitat (e.g., feeding, nesting, spawning, and/or rearing young) for aquatic species that also live in TNWs (e.g. amphibians, macroinvertebrates, birds, fishes, mammals, etc.). Each of these tributaries and their respective adjacent wetlands are likely to have an effect that is more than speculative or insubstantial on the chemical, physical, and biological integrity of a traditional navigable water.

The project area is located at the confluence of two perennial branches (North Canyon Canal and Oil Drain Canal) of a relatively permanent tributary (Sewage Canal) of the Great Salt Lake. Substantial flow was observed in each of the two branches during our field visit on August 14, 2017. These wetlands generally fall within 300 feet of the current footprint of the tributary system's banks. Both branches were relocated to facilitate the construction of the interchange during the 1970s. The wetlands under review all directly-abutted abutted the tributary system prior to construction of the interchange (see Figure 2).

Based on historic aerial photography, similarly situated wetlands were once much more numerous in this low area (see Figures 3 and 4). Most of these former wetlands have now been filled and developed (see Figure 5). Of approximately 790 acres of strong wetland signatures along the tributary that can be seen in the 1937 and 1958 aerial photographs, only approximately 310 acres (~40%) remain today. It should be noted that the wetland signatures picked up on these aerial photographs are likely only a subset of the wetlands in the area and the subject area is but a fraction of the similarly situated wetlands along the tributary system. It is likely that wetland loss has been more substantial that can be easily seen with historical aerial photographs alone.

It is reasonable conclusion that this tributary system and its remaining adjacent wetlands (see Figure 6) have a more than speculative or insubstantial effect on the chemical, physical, and biological integrity of the tributaries and downstream TNWs.

☒ Separated by berm/barrier. Explain: **The roadway infrastructure impounds water in Wetlands 1a, 1b, 1c, 2, 3, 4, and 5 that would otherwise sheet flow into the adjacent tributary system. All of these wetlands directly abutted the tributary system prior to reconfiguration of drainage and impoundment associated with original highway construction.**

(d) Proximity (Relationship) to TNW
Project wetlands are **2-5** river miles from TNW.
Project waters are **2-5** aerial (straight) miles from TNW.
Flow is from: **Wetland to 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: **No water observed during August site visit. Wetlands receive highway runoff, thus it is likely that they capture sediment and chemical components of highway runoff (e.g. salts, cadmium, oil and grease, etc).**
Identify specific pollutants, if known:

(iii) Biological Characteristics. Wetland supports (check all that apply):
☐ Riparian buffer. Characteristics (type, average width):
☒ Vegetation type/percent cover. Explain: **The subject wetlands are dominated by hydrophytic vegetation appropriate for the community type.**
☐ Habitat for:
☐ Federally Listed species. Explain findings:
☐ Fish/spawn areas. Explain findings:
☐ Other environmentally-sensitive species. Explain findings:
☒ Aquatic/wildlife diversity. Explain findings: **The subject wetlands are suitable habitat for amphibians, birds, and macroinvertebrates that utilize the tributary system and TNWs.**

3. Characteristics of all wetlands adjacent to the tributary (if any)
All wetland(s) being considered in the cumulative analysis: **25-30**
Approximately **311** 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)
Wetland 1 a, b, c (N, N, N)	**0.64**	**Wetland 2 (N)**	**0.25**
Wetland 4 (N)	**0.59**	**Wetland 5 (N)**	**1.32**
Wetland 6 (N)	**0.07**	**Wetland A1 (Y)**	**9.45**
Wetland B1 (Y)	**2.8**	**Wetland C1 (Y)**	**2.14**
Wetland D1 (Y)	**1.7**	**Wetland E1 (N)**	**0.75**
Wetland F1 (Y)	**12.29**	**Wetland G1 (Y)**	**9.54**
Wetland H1 (Y)	**11.6**	**Wetland I1 (Y)**	**36.12**
Wetland J1 (Y)	**63.92**	**Wetland K1 (Y)**	**18.18**
Wetland L1 (Y)	**2.99**	**Wetland M1 (Y)**	**43.74**
Wetland N1 (N)	**21.03**	**Wetland O1 (N)**	**2.95**
Wetland P1 (Y)	**2.77**	**Wetland Q1 (N)**	**32.91**
Wetland R1 (N)	**2.64**	**Wetland S1 (N)**	**3.4**
Wetland T1 (Y)	**18.46**	**Wetland U1 (N)**	**6.83**

Summarize overall biological, chemical and physical functions being performed: **The subject wetlands and similarly-situated wetlands occupy landscape positions that allow them to serve important functions that are necessary to maintain the chemical, physical, and biological integrity of the Sewage Canal and the Great Salt Lake. Such functions include capturing and holding flood waters, interception of sheet flow from uplands, groundwater recharge, provide base flow to the Oil Drain Canal, slow release of water to downstream areas, capturing sediments and pollutants, nutrient transformations and cycling, providing habitat that is utilized by wildlife for feeding, and rearing young; and production of detritus, macroinvertebrates, and other biota that support local food webs.**

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW? **Yes**
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs? **Yes**
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW? **Yes**

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: **The East Ditch is an ephemeral tributary to the North Canyon Canal. The features contains hydrophytic vegetation and ordinary high water mark, and substantial flow was observed in the feature on September 19, 2017.**

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: **Wetlands 1a, 1b, 1c, 2, 3, 4, and 5 within the assessed area are located**

in close proximity to the perennial North Canyon Canal branch of broader Sewage Canal perennial tributary system of the Great Salt Lake. Substantial wetland loss has occurred in the area, and only a fraction of the original wetlands associated with this tributary remain in existence. Despite these historic wetland losses, this tributary and its adjacent wetlands have a more than speculative or insubstantial effect on the physical, chemical, and biological health of downstream TNWs. The tributary and its adjacent wetlands are situated in landscape positions that allow them to serve important functions that are necessary to maintain the chemical, physical, and biological integrity of the Sewage Canal tributary system and the Great Salt Lake. Such functions include capturing and holding flood waters, interception of sheet flow from uplands, groundwater recharge, provide base flow to Spring Creek, slow release of water to downstream areas, capturing sediments and pollutants, nutrient transformations and cycling, providing habitat that is utilized by wildlife for feeding, and rearing young; and production of detritus, macroinvertebrates, and other biota that support local food webs.

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: **North Canyon Canal, Oil Drain Canal, and Tributary to North Canyon Canal: Substantial flow observed in August with little preceding rainfall.**
☐ 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: **6661.35** linear feet **20** feet wide. **(5.16 acres)**
☐ Other non-wetland waters: acres.
Identify type(s) of waters:

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

Provide estimates for jurisdictional waters within the review area (check all that apply):
☒ Tributary waters: **759.89** linear feet, **4 feet** wide. **(0.07 acre)**
☐ 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: **Wetland 7 directly abuts a perennial tributary to the North Canyon 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: **0.12** acre.

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. **Wetlands 1a, 1b, 1c, 2, 3, 4, and 5**

Provide acreage estimates for jurisdictional wetlands in the review area: **3.91** 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.

[8]See Footnote # 3.

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.
☐ 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): **Wetland 6 appears to be a result of a leaking pipe. The Corps does not consider Wetland 6 to be a natural aquatic resource.**

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:

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.

[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.*

☐ 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; Salt Lake City North**
☒ USDA Natural Resources Conservation Service Soil Survey. Citation: **Davis County, Utah**
☒ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s):
☒ FEMA/FIRM maps:
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): 1937, 1946, 1977, 1990s, 2003, 2006, 2009, 2011, 2012, 2014, 2016 (SCS, UGS, UGDL, NAIP, and Google Earth)
or ☒ Other (Name & Date): Delineation report and onsite photos by Corps' project manager
☐ 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:

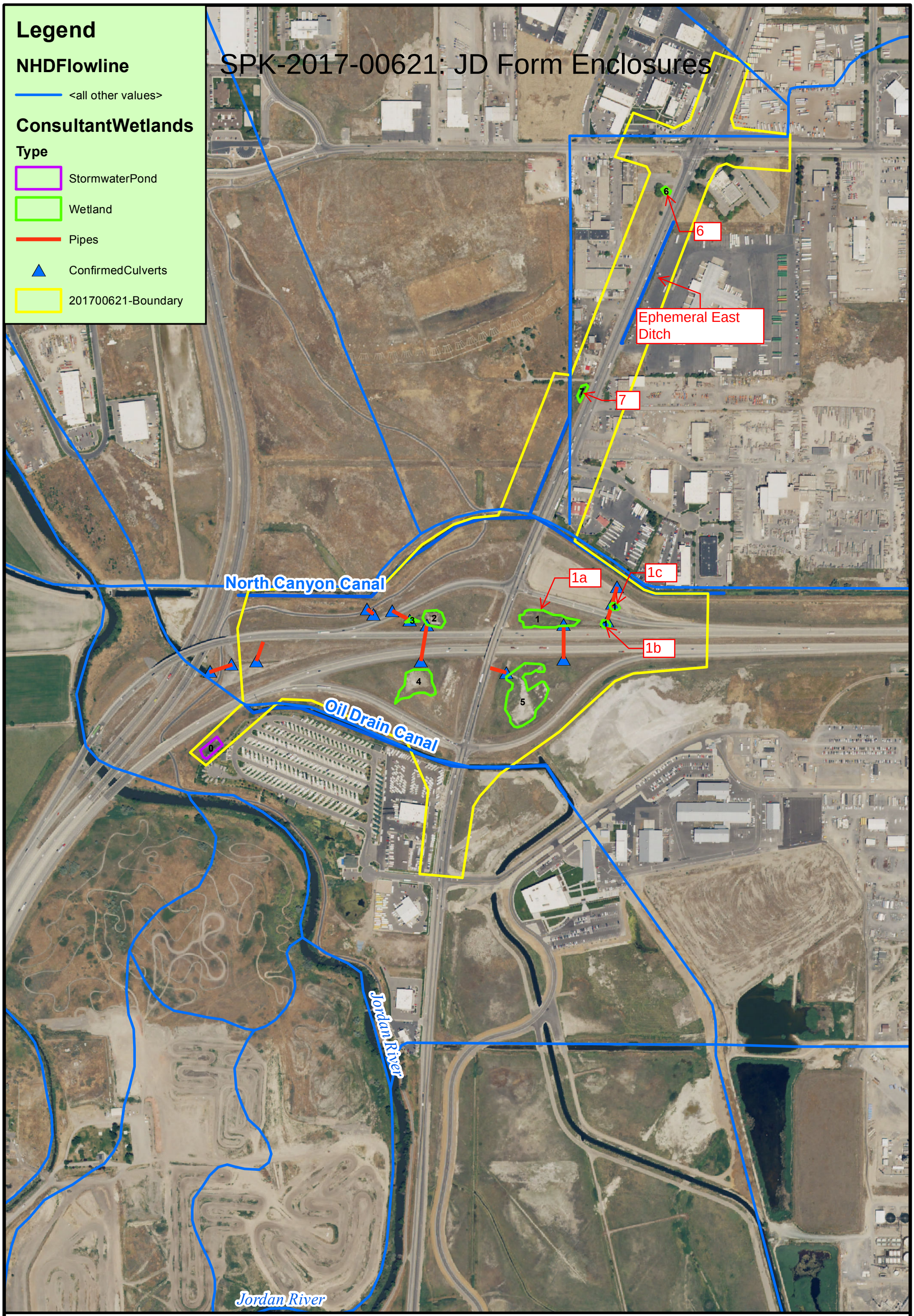


Figure 1: SPK-2017-00621 - UDOT SR 68/I-215
2016 Aerial noting Observed Pipes and Culverts

Created by: MSW
Date: 2017.08.10
Source Data: NAIP/UGDL Aerial Photos
Original Scale: 1:4500
Revised: NA

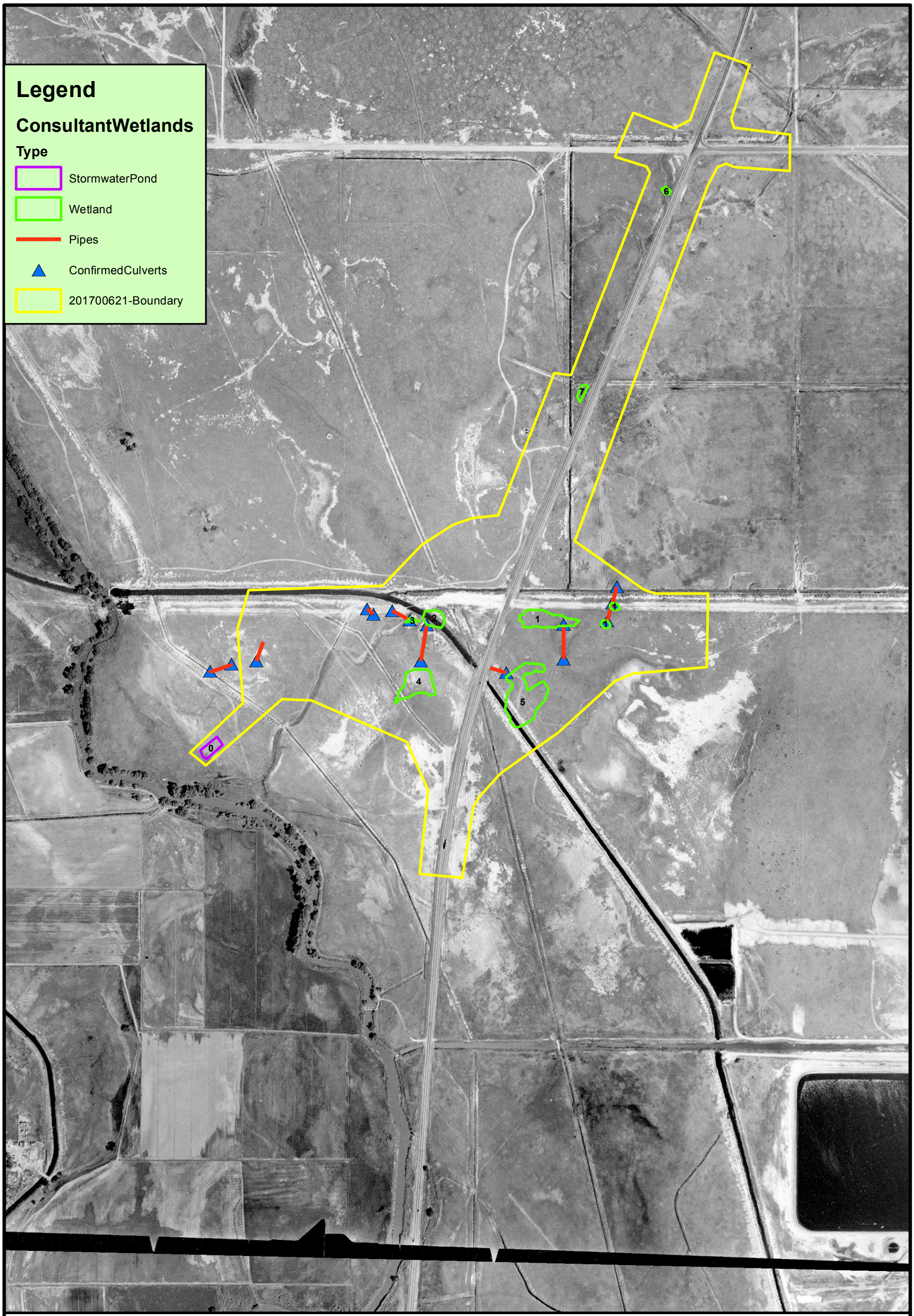


Figure 2: SPK-2017-00621 - UDOT SR 68/I-215
1958 Aerial showing former Tributary Configuration

Created by: MSW
Date: 2017.08.10
Source Data: NAIP/UGDL Aerial Photos
Original Scale: 1:4500
Revised: NA

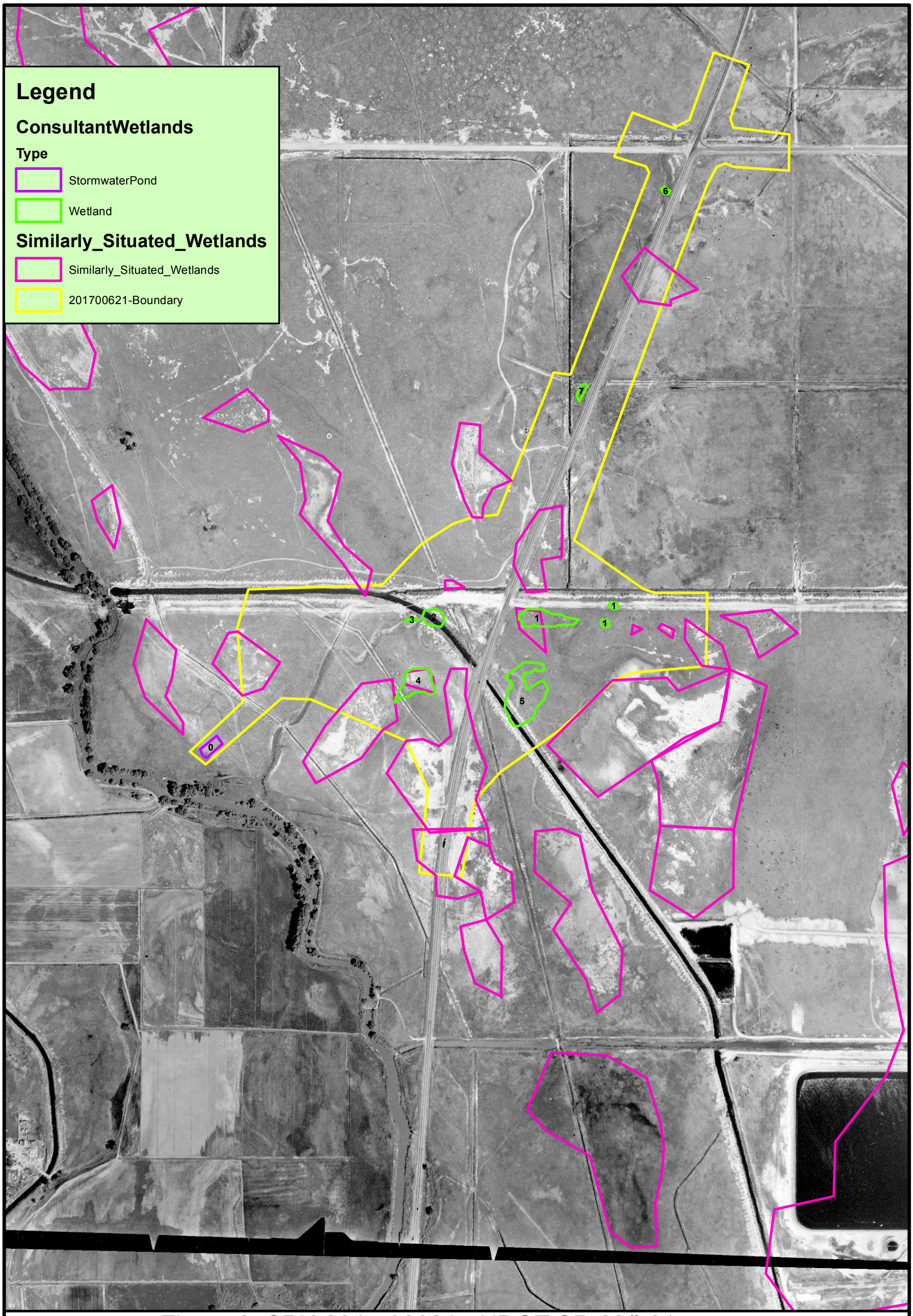


Figure 3: SPK-2017-00621 - UDOT SR 68/I-215
1958 Aerial Highlighting Obvious Wetland Signatures

Created by: MSW
Date: 2017.08.10
Source Data: NAIP/UGDL Aerial Photos
Original Scale: 1:4500
Revised: NA

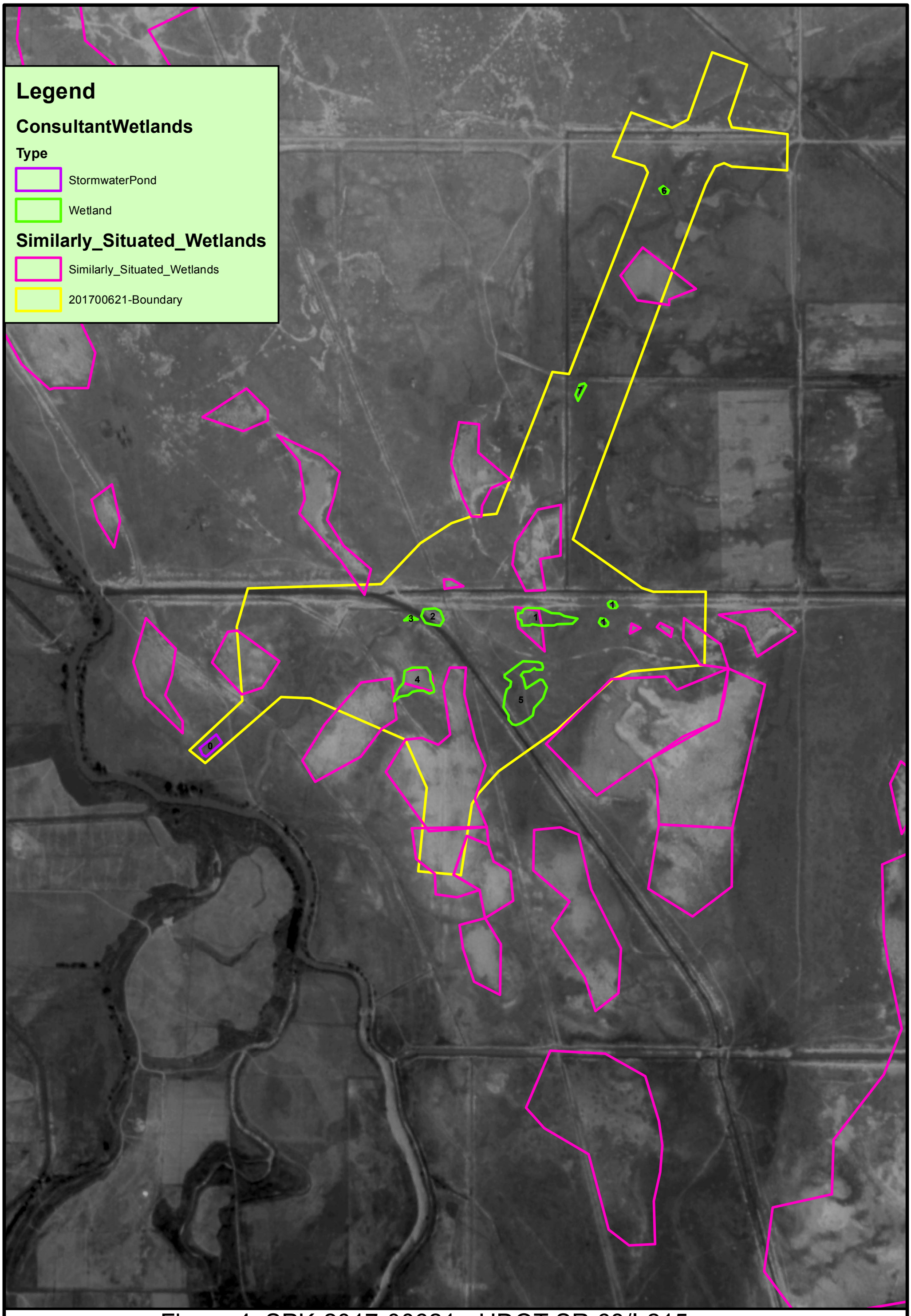


Figure 4: SPK-2017-00621 - UDOT SR 68/I-215
1937 Aerial Highlighting Obvious Wetland Signatures

Created by: MSW
Date: 2017.08.10
Source Data: NAIP/UGDL Aerial Photos
Original Scale: 1:4500
Revised: NA

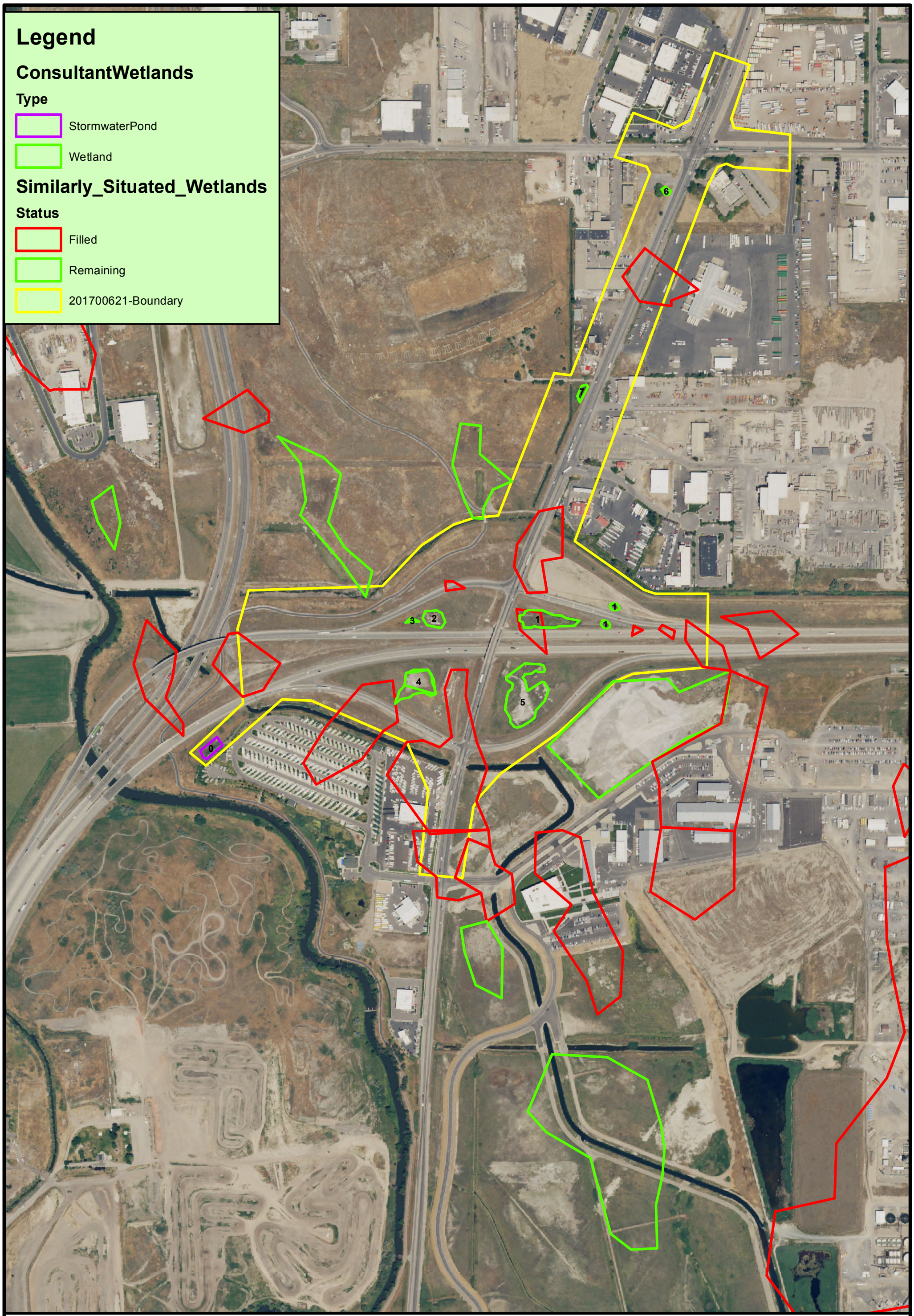
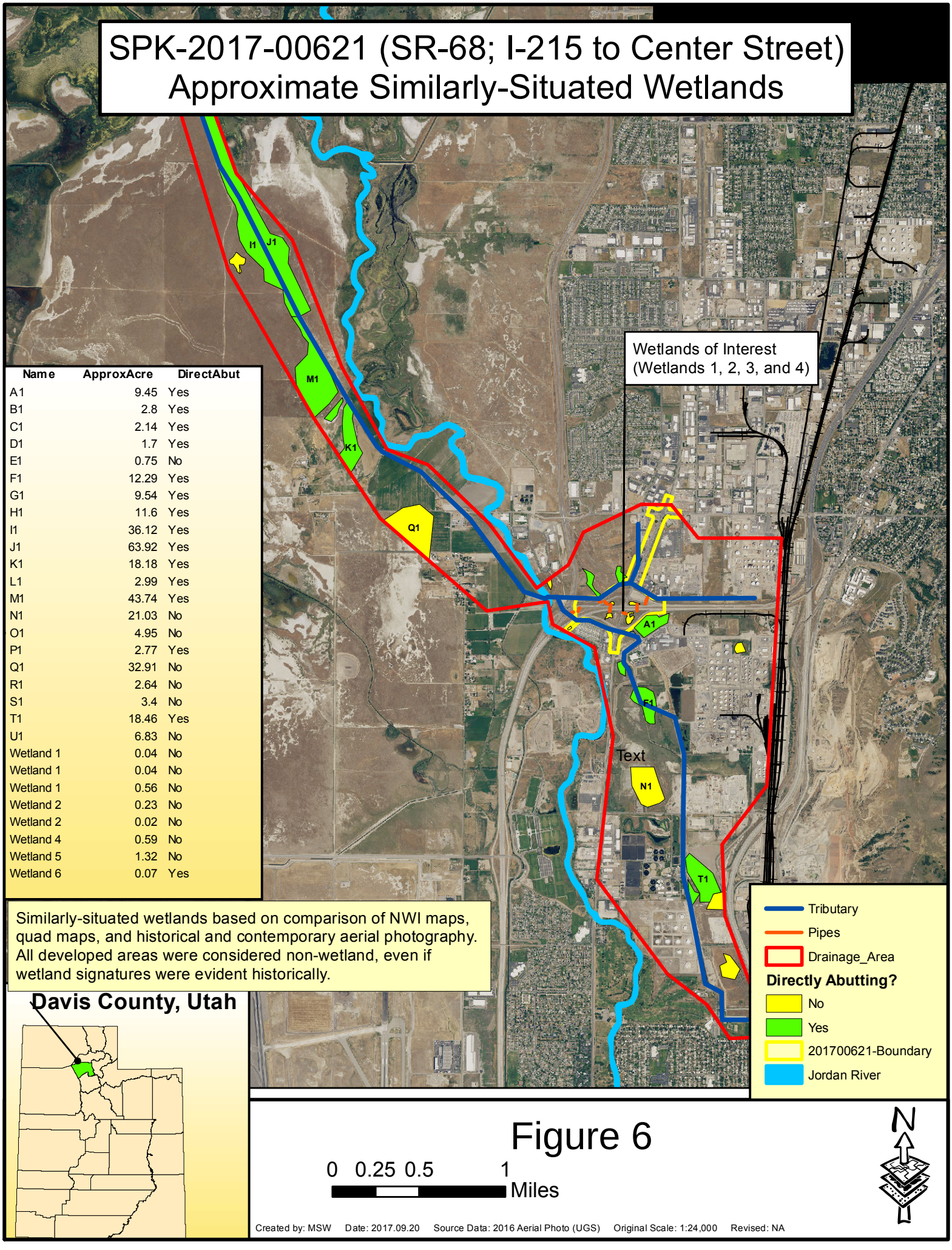


Figure 5: SPK-2017-00621 - UDOT SR 68/I-215
2016 Status of Obvious Historic Wetland Signatures

Created by: MSW
Date: 2017.08.10
Source Data: NAIP/UGDL Aerial Photos
Original Scale: 1:4500
Revised: NA

SPK-2017-00621 (SR-68; I-215 to Center Street)
Approximate Similarly-Situated Wetlands



Name	ApproxAcre	DirectAbut
A1	9.45	Yes
B1	2.8	Yes
C1	2.14	Yes
D1	1.7	Yes
E1	0.75	No
F1	12.29	Yes
G1	9.54	Yes
H1	11.6	Yes
I1	36.12	Yes
J1	63.92	Yes
K1	18.18	Yes
L1	2.99	Yes
M1	43.74	Yes
N1	21.03	No
O1	4.95	No
P1	2.77	Yes
Q1	32.91	No
R1	2.64	No
S1	3.4	No
T1	18.46	Yes
U1	6.83	No
Wetland 1	0.04	No
Wetland 1	0.04	No
Wetland 1	0.56	No
Wetland 2	0.23	No
Wetland 2	0.02	No
Wetland 4	0.59	No
Wetland 5	1.32	No
Wetland 6	0.07	Yes

Similarly-situated wetlands based on comparison of NWI maps, quad maps, and historical and contemporary aerial photography. All developed areas were considered non-wetland, even if wetland signatures were evident historically.

Figure 6

Created by: MSW Date: 2017.09.20 Source Data: 2016 Aerial Photo (UGS) Original Scale: 1:24,000 Revised: NA