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#### DEPARTMENT OF THE ARMY

## U.S. ARMY ENGINEER DISTRICT, SACRAMENTO CORPS OF ENGINEERS 1325 J STREET SACRAMENTO CA 95814-2922

REPLY TO ATTENTION OF

October 7, 2009

Regulatory Division (SPK-2004-50167)

Kevin Strait 2815 Daybreaker Drive Park City, Utah 84098

Dear Mr. Strait:

As you know, on July 15, 2009, the Corps' South Pacific Division completed its review of your administrative appeal of the Sacramento District's approved jurisdictional determination for the Strait Property, in Park City, Summit County, Utah. The appeal was remanded to the Sacramento District Engineer with specific instructions for reconsideration.

We have completed a reevaluation of relevant factors and prepared further documentation for each of the appeal reasons found to have merit in the remand. Enclosed please find a copy of our September 29, 2009 memorandum addressing the remand findings and our responses to each of the actions. Based this additional review, we have concluded that our jurisdictional determination dated September 30, 2008 for the waters of the United States, including wetlands, on Strait Property remains unchanged.

Please refer to identification number SPK-2004-50167 in any correspondence concerning this project site. If you have any questions, please contact Hollis Jencks at the Utah Regulatory Office, 533 West 2600 South, Suite 150, Bountiful, Utah 84010, telephone 801-295-8380, extension 18 or email *hollis.g.jencks@usace.army.mil*.

Sincerely,

Michael S. Jewell

Chief, Regulatory Division

Enclosure



#### DEPARTMENT OF THE ARMY

### U.S. ARMY ENGINEER DISTRICT, SACRAMENTO CORPS OF ENGINEERS 1325 J STREET SACRAMENTO CA 95814-2922

REPLY TO ATTENTION OF

October 6, 2009

#### MEMORANDUM FOR RECORD

SUBJECT: Remand Response for Kevin Strait Appeal (Regulatory Division SPK-2004-50167)

**Reason 1:** The District was required to conduct a significant nexus analysis and document that there is a significant nexus to the nearest Traditionally Navigable Water (TNW) prior to asserting jurisdiction over wetlands on the property.

Finding: This reason for appeal has merit.

**Action:** The District must further evaluate wetlands on the property and the tributary to which it has determined them to be adjacent. If, as a result of that evaluation, the District concludes that a significant nexus determination is required, it must complete and document any required significant nexus evaluation.

**Response:** Both long term seasonal flow and a physical and chemical nexus are demonstrated in the available record and documentation for the Strait Property. The three wetlands within the subject property are all physically connected (directly abutting) to downstream waters specifically Kimball Creek, East Canyon Creek and East Canyon Reservoir, a Traditional Navigable Water. Figures 2 and 3 labeled these separate wetlands as A, B, and C.

Wetland A: Wetland A is a seasonal wet meadow wetland and is located along the north property line. This wetland directly abuts Culvert #3 located on the adjacent parcel to the north (Figure 2 & Photos #1 & #2). This culvert passes under an upland berm which outlets into a ditch which was constructed thru wetlands on the property to the north. This ditch is at least seasonal (seasonal RPW) based on the presence of duckweed (Lemna sp.) and visual observations of water in the ditch in late September 2009. This northern property was delineated in 1991 and is mainly comprised of wetlands and a bisecting ditch. Water in the ditch flows northeast to 300 West and then north along the road. The water then passes under 300 West at through Culvert #5 to a perennial tributary/ditch along 300 West and continues northeast to Kimball Creek.

Wetland B: Wetland B consists of a seasonal wet meadow wetland transitioning to open water as it drains to the northeast. This wetland is the largest and directly abuts/flows directly into a perennial tributary located on the east side of 300 West. This connection is seasonal or longer based on photos of the connection in November of 2007 and August

2008 and knowledge and general observation of the area. An approximately 18" culvert connects this wetland to the eastside of 300 West. The downstream perennial tributary bisects a large and contiguous wetland until the confluence with Kimball Creek.

Wetland C: Wetland C is also seasonal and contiguous with an approximately 0.2 acre seasonal wetland that is bisected by the southern property line. The water from this wetland flows from the Strait property to the southeast onto the adjacent southern property. It was determined that the southern property had a contiguous wetland from reviewing aerial photographs and field observations of hydrophytic plants mainly reed canary grass (*Phalaris arundinacea*) and hydrologic indicators such as soil depression from horse hooves. The portion of the wetland on the southern property directly abuts a road-side ditch filled with hydrophytic vegetation. This ditch then drains east under 300 West via Culvert #1 into the perennial wetland system to the east and then into Kimball Creek, a perennial RPW.

Directly east of 300 West is a large contiguous wetland, approximately 100 acres, which extends east and south to Old Ranch Road and north to 5200 North. This is clearly evident on the aerial photograph signatures of Figure 1 and the other photographs analyzed for this appeal, dating from 2006 to 1987. Aerial photo types including infrared, black and white and color. Six separate parcels to the east have been delineated for waters, of which each entire parcel was completely classified as wetland. These properties are directly east of 300 West, and east and north of the subject property, extending approximately 0.25 miles north. Immediately downgradient of the subject property, east of 300 West along the perennial tributaries' wetland shelf, are soils classified as Histosols. This soil classification can be identified throughout this wetland system and has been recognized in a few of the verified wetland delineations. Histosols are soils that form in areas of typical year long saturation. The presence of histosols demonstrates the consistent saturation of the large contiguous wetland east of 300 West. Another indicator of year long saturation is the presence of obligate hydrophytic species, such as, water groundsel (Senecio hydrophilus), Nebraska sedge (Carex nebrascensis), duckweed (Lemna sp.) and cattails (Typha latifolia). The large wetland system provides for perennial water discharged into the unnamed tributaries flowing directly to Kimball Creek and on downstream.

The surrounding area is currently zoned as Rural Residential, which allows 1 housing unit per 10 acres and can include small at-home businesses. East Canyon Creek is listed as a 303(d) impaired water from the East Canyon Reservoir to the headwaters (confluence of Kimball and Basin Canyon Creek). The specific pollutants or stressors are total phosphorus and dissolved oxygen. A Total Maximum Daily Load (TMDL) plan has been prepared to restore beneficial uses and water quality standards. Many of the parcels in the area are used for boarding and grazing of livestock ranging from 1 animal for personal use to larger commercial boarding stables. This contributes to the phosphorous loading of East Canyon Creek. The wetlands on the subject property play a role in filtering pollutants and nutrients coming from this and adjacent properties. East Canyon Creek is also listed as a Class 3A Water under the Utah Water Quality/Beneficial Uses and is protected for cold water species of game fish and other aquatic

organisms in the food chain. The Strait property wetlands and adjacent wetlands are seasonally productive sites for micro and macro invertebrates, wetland plants and other aquatic organisms which contribute to downstream food chains and to the uptake of nutrients, pollutants and other chemical and biological compounds.

The "significant nexus standard" for the Strait Property and down-gradient tributaries have been evaluated as a matter of policy, and the physical, chemical and biological nexus have been demonstrated. Following Corps and EPA Rapanos guidance, the waters previously identified on this property are jurisdictional waters of the United States under Section 404 of the Clean Water Act because they abut a relatively permanent water (RPW) and have a significant nexus to a TNW

**Reason 2:** A dirt road (300 West) prevents a direct surface connection to the relative permanent tributary to East Canyon Reservoir.

Finding: This reason for appeal has merit.

**Action:** The district must evaluate the Appellants assertion that the road (300 West) eliminates a direct surface connection between wetlands on the property and the tributary to East Canyon Reservoir. That evaluation must be documented in the Districts final decision.

Response: The dirt road (300 West) in question does not eliminate a direct surface connection between wetlands on the property and the downstream TNW. The road has four open culverts that continue wetland hydrology and allow water to flow directly from wetlands on the subject property and adjacent properties into four separate tributaries which bisect one large contiguous wetland and flow to Kimball Creek. Kimball Creek is a perennial tributary of East Canyon Creek which flows directly into East Canyon Reservoir, a Traditional Navigable Water. Wetland A directly abuts a culvert which passes under a small earthen berm (Photos #1 and #2) that flows to the north and bisects two separate parcels (Parcel 1 & 2) and a large contiguous wetland between both parcels (Photos #9, #10 & #11). Flows at 300 West flow to the east through a culvert #5 adjacent to a northern driveway (Photos #13 & #14). Wetland B flows onto the northern parcel #1 and 300 West ROW which continues through a culvert #2 (Photos #7 & #8) to a perennial tributary just east of 300 West. As illustrated in the attached photos there is direct surface connection between this wetland and adjacent wetlands to the north. Wetland C is a small contiguous wetland that flows to the east into a ditch and culvert #1 and directly into a perennial tributary.

**Reason 3:** Restoration and harvesting activities over the past five years have allowed upland species to spread into wetlands and may have reduced the extent of wetlands on the property.

Finding: This reason for appeal has merit.

**Action:** The District must reevaluate wetlands on the property to determine if changes in vegetation that have occurred since the 2004 delineation have resulted in a change in the extent or configuration of wetlands on the property.

Response: The subject property is zoned rural residential and has historically been utilized to graze a small number of horses for what appeared to be private, non-commercial use, prior to Mr. Strait's ownership. Based on available information, most of the property, including the wetlands, was subjected to earthmoving activities, including plowing, discing and possibly seeding sometime in 2007, (photo #16). This kind of activity may not only have resulted in a non-natural human-induced change in vegetation, but may also have moved material into otherwise lower wetland areas changing their bottom elevations and/or reach. Since the land is not part of an ongoing farming operation as defined in 328.4(a)(1)(ii), discharges of dredged or fill material into wetlands associated with the earthmoving/redistribution of material (e.g., plowing, discing/seeding) activities are not exempt from Section 404 of the Clean Water Act. Since no 404 permit was issued for discharges into waters at the site, they would constitute unauthorized discharges of dredged or fill material. At a minimum such areas would need to be evaluated as problem or atypical situations, where vegetation cannot be relied upon to identify or dispute the current extent of wetlands relative to previously verified wetland boundaries.

**Reason 4:** Construction activities on adjacent properties including construction of homes, waterlines, and sewer lines have altered the hydrology of wetlands on the property and may have reduced the extent or configuration of wetlands on the property.

Finding: This reason for appeal may have merit.

**Action:** The district must reevaluate wetlands on the property to determine if construction activities on adjacent properties that have occurred since 2004 delineation have resulted in a change in the extent or configuration of wetlands on the property.

Response: The subject property lies adjacent to a large groundwater discharge area that flows to the northeast. Most of the adjacent development has been down gradient along 300 West and on the eastern side of 300 West. Due to the property being up slope from the development and this area being a large groundwater discharge point, the surrounding development has had only a minimal effect, if any, on the subject property's hydrology and extent or configuration of wetlands. The sewer line was constructed in 2001-2002 and included the placement of trench dikes to prevent interception/draining of groundwater. This predates the 2004 wetland delineation. Four properties on the east side of 300 West have been developed since 2004. However, all natural downstream flows have been maintained and no tributaries have been modified. A waterline was constructed in the 300 West road and did sever several culverts in the road during its construction. It was also required to construct trench dikes to prevent interception/draining of groundwater. Additionally, the culverts were replaced/repaired and flow interception/draining of groundwater. Additionally, the culverts were replaced/repaired and flow

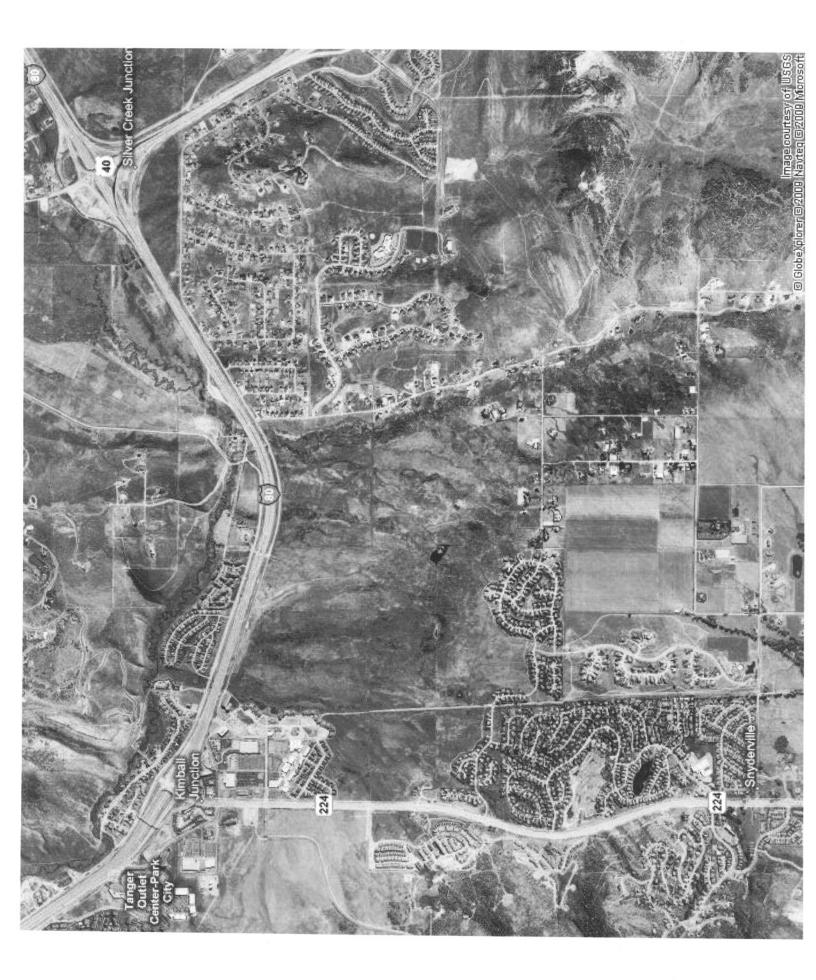
was re-established. There has been no new development up gradient from the subject property that would have an affect of diverting overland sheet or groundwater flows from the area since the 2004 wetland delineation. This is illustrated by comparing 1987, 1997 and 2006 aerial photographs within the record.

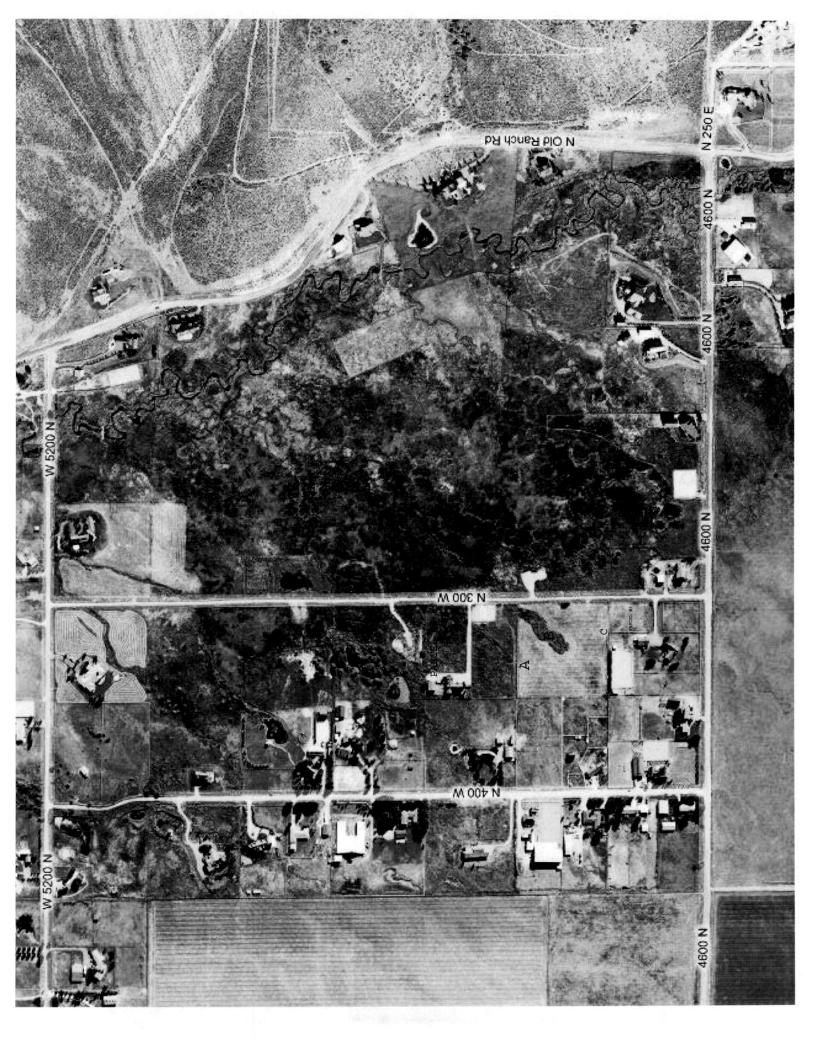
Evaluation of the site was somewhat problematic since these wetlands are seasonal and they were reassessed and data collected only during the driest part of the year. Additionally, the land, including previously delineated wetlands, has been modified by unauthorized activities (e.g., earthmoving, including plowing) and vegetative signatures have been altered by seeding and mowing for at least the past two years. However, based on the available information, the wetland boundaries appear to remain virtually the same as those identified in 2004, despite ongoing manipulation of the site and of adjacent areas.

Michael S. Jewell

Chief, Regulatory Division

Sacramento District









### **Strait Appeal Photos**



#1- North culvert #3 located on adjacent property connects Strait wetland. (Sept. 2009)



#2- Culvert #3 looking Northwest from Strait wetland. (Sept. 2009)



#3- Looking southeast at southern wetland onto adjacent property. (Sept. 2009)



#4- Culvert #1 under 300 West which connects southern wetland with tributary. (Sept. 2009)



#5- Looking west at 300 West culvert #1 and Strait Property. (Sept. 2009)



#6- Looking west at Parcel #3 and Strait Property. Parcel #3 wetland indicators are hydrophytic vegetation (*Phalaris arundinacea*) and hoof depression from horses in saturated soils. (Sept. 2009)



#7- Culvert #2 under 300 West that connects with Strait main wetland. (Sept. 2009)



#8- Looking southwest from 300 West culvert #2 at Strait main wetland. (Sept. 2009)



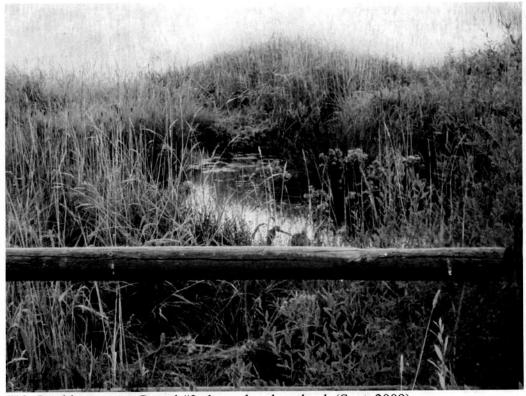
#9- Looking south at Parcel #1 and Strait Property. (Sept. 2009)



#10- Close up photo near culvert #4 of inundation within Parcel #1 ditch. (Sept. 2009)



#11- Looking northeast at Parcel #2 wetland and ditch. (Sept. 2009)



#12- Looking west at Parcel #2 channel and wetland. (Sept. 2009)



#13- Looking northeast at culvert #3. (Sept. 2009)



#14- Looking east at flow culvert #3 outlet. (Sept. 2009)



#15- Vegetated tributary looking northeast. (Sept. 2009)



#16- Wetland discing or grading looking southwest. (Nov. 2007).