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

 REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 	1: October 23.	. 2017
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B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, Skye Canyon Project (formerly Kyle Canyon Landtek), SPK-2005-50517

C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: Nevada County/parish/borough: Clark County City: Las Vegas Center coordinates of site (lat/long in degree decimal format): Lat. 36.3149°, Long115.3085° Universal Transverse Mercator: 11 651851.36 4020205.31 Name of nearest waterbody: Lower Las Vegas Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lake Mead Name of watershed or Hydrologic Unit Code (HUC): Las Vegas Wash, 15010015 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: October 18, 2017 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in a 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:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
	ere are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. equired]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (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: acres.
	c. Limits (boundaries) of jurisdiction based on: Pick List 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: Wash 3 and Wash 5 are non-RPW's (ephemeral channels) that do have an ordinary high water mark (OHM). However, they do not have a significant nexus with a TNW (Lake Mead), and are therefore not jurisdictional waters of the U.S.

SECTION III: CWA ANALYSIS

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.

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 waterbody⁴ 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: (Las Vegas Wash) 1,860 square miles

Drainage area: (Washes 3 & 5) 0.8 square miles

Average annual rainfall: **4.2 inches** Average annual snowfall: **minimal**

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 2 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are 15-20 river miles from RPW.

Project waters are **30 (or more)** aerial (straight) miles from TNW.

Project waters are **10-15** aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: N/A

Identify flow route to TNW⁵: Prior to development, Wash 3 and Wash 5 were isolated waters, ending in overland flow before or soon after reaching Interstate-95. This is confirmed by USGS National Hydrography Data Set, National Wetland Inventory Maps, and Google Earth 1990 aerial image. Currently, the two washes converge east of Interstate 95, before being directed into Clark County

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.

Flood Control Facilities. These facilities direct storm water from the washes into one of two flow paths. The upper flow path enters a detention basin (Environmental Enhancement Area South Detention Basin at 36.3160. -115.2667) where sediment and organic matter settle out before converging with the second flow path. Both these flow paths then carry storm water through a series of above ground concrete lined channels and underground pipes, as well as passing through two "downstream" detention basins (Lower Las Vegas Wash Detention Basin at 36.2556, -115.1634; and Cheyenne Peaking Basin at 36.2216, -115.1140) and the wetlands at the Clark County Wetland Park before emptying into the Las Vegas Wash. The Las Vegas Wash flows into Lake Mead, the nearest TNW, approximately 40 miles distance from the project site.

	Tributary stream order, if known: 2	
(b)	General Tributary Characteristics (check all that apply) Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Exp	
	Tributary properties with respect to top of bank (estimate Average width: 10-20 feet Average depth: 4-6 feet Average side slopes: Vertical (1:1 or less).	ate):
	Primary tributary substrate composition (check all that Silts Sands Gravel Bedrock Vegetation. Type/% cov	☐ Concrete ☐ Muck
	Tributary condition/stability [e.g., highly eroding, slough stable because vegetation is well established above average depth of the OHW zone is 4 inches. The surrounding ground surface and natural walls ar Presence of run/riffle/pool complexes. Explain: None Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 3%	ove the OHW zone (streambed to OHWM). The channels are entrenched up to 18 feet below the
(c)	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area Describe flow regime: In response to heavy stor Other information on duration and volume: Flow regim projected drainage area. However, flow likely on immediately following a large storm event, which the low annual precipitation in the subject region	m events ne has not been studied or documented for the ly occurs for short durations (i.e.<24 hours) n only occurs a few times in any given year due to
	Surface flow is: Discrete and confined . Characteristic OHWM, bed and banks with other physical indicathough relatively stable because vegetation is well.	ations. The channels are severely entrenched,
	Subsurface flow: No . Explain findings: Dye (or other) test performed:	
	 ☐ shelving ☒ vegetation matted down, bent, or absent ☐ leaf litter disturbed or washed away ☒ sediment deposition 	 □ the presence of litter and debris ☑ destruction of terrestrial vegetation □ the presence of wrack line ☑ sediment sorting ☑ scour □ multiple observed or predicted flow events ☑ abrupt change in plant community

⁶A 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:
	(iii)	Cha c p d	emical Characteristics: aracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed haracteristics, etc.). Explain: Surface waters were not observed within the project area as they are only present for short durations immediately following a storm event. Because there is currently no upstream levelopment, there are no known upstream pollutants. Intify specific pollutants, if known: N/A
	(iv)		logical 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:
2.	Cha	arac	teristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		ysical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha c	emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed haracteristics; etc.). Explain: ntify specific pollutants, if known:

⁷lbid.

	(iii) Biological Characteristics. W	/etland supports (check a	all that apply):									
	Riparian buffer. Characteris	tics (type, average width):										
	Vegetation type/percent cover	er. Explain:										
	☐ Habitat for:											
	☐ Federally Listed species	s. Explain findings:										
	Fish/spawn areas. Explain findings:											
	Other environmentally-sensitive species. Explain findings:											
	Aquatic/wildlife diversity. Explain findings:											
3.												
	All wetland(s) being considered in the cumulative analysis: Pick List											
	Approximately acres in total are being considered in the cumulative analysis.											
	For each wetland, specify the fo	ollowing:										
	Directly about 2 (M/N)	Cina (in carea)	Directly shorts 2 (V/NI)	C: (in)								
	Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)								
	Summarize overall biological, cl	hemical and physical funct	tions being performed:									
	Carrinanzo Overan biological, ci	nonnoai ana physical lanci	dons being perioritied.									

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:

Historically, flow in Wash 3 and Wash 5 did not contribute to Lake Mead, the nearest TNW. USGS National Hydrography Dataset (which is also used in National Wetland Inventory and Soil Survey maps) indicate that Wash 3 and Wash 5 were historically isolated, and did not carry enough flow to make a connection to Las Vegas Wash. Presently, urbanization and the development of flood control and stormwater conveyance facilities has created a potential connection to Lake Mead. However, Washes 3 and 5, the two ephemeral drainages within the project site, do not possess more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of Lake Mead for the following reasons:

a) Contribution of flow from Wash 3 and Wash 5 is negligible based on a comparison of watershed area: The watershed area of the relevant reach of Wash 3 and Wash 5 is 0.83 square miles, while the watershed area of Las Vegas Wash is 1,860 square miles. Watershed area of Wash 3 and Wash 5 make up 0.04 percent of the Las

Vegas Wash watershed. The infrequent storm water discharge from Wash 3 and Wash 5 that would make it to Lake Mead, 40 miles from the project site, would be a fraction of the volume of discharge from other areas of the watershed during a storm event.

- b) Contribution of flow from Wash 3 and Wash 5 occurs only during storm events and are eclipsed by the daily discharges from Las Vegas Valley's wastewater treatment facilities and other hydrology inputs: Baseline flows in Las Vegas Wash are approximately 200 cubic feet per second. Most of the flow in the Las Vegas Wash is treated effluent, approximately 170 million gallons per day. Other inputs in the Upper and Lower Las Vegas Wash can include urban runoff, shallow groundwater, and untreated storm water discharges. According to the Southern Nevada Water Authority, the result of inflows from the Las Vegas Wash contribute approximately 2 percent of Lake Mead's volume. Wash 3 and Wash 5 carry flows for short periods, during infrequent heavy storm events, and their contribution to the overall inflows of Las Vegas Wash to Lake Mead would not be measurable.
- c) The two ephemeral drainages at the project location do not possess more than a speculative or insubstantial effect on the physical integrity of Lake Mead: The infrequent storm water flows from Washes 3 and 5 pass through several detention basins that capture storm water flows, effectively isolating waters from Wash 3 and Wash 5 from Lake Mead. The Environmental Enhancement Area South is a 450 acre-feet (AF) detention basin. The detention basin is encountered by the upper flow paths (flows have the ability to split at U.S. 95) prior to reaching the Lower Las Vegas Wash. Further down, flows are controlled by the Lower Las Vegas Wash Detention Basin (approximate volume: 700 AF) and the Las Vegas Wash Cheyenne Peaking Basin (approximate volume: 450 AF). While the detention basins function to contain waters only during major storm events, it is during these events that the two washes experience flow. These detention basins act not only to filter out sediment, but act to recharge groundwater by infiltration of storm water within the basins. It should be noted that the interior of the Lower Las Vegas Wash Detention Basin contains a lighted baseball field and four lighted basketball courts, which indicates that the basin is rarely filled. Therefore, the two washes have no more than a speculative or insubstantial contribution of storm water and sediment to a TNW.
- The two ephemeral drainages at the project location do not possess more than a speculative or insubstantial effect on the biological and chemical integrity of Lake Mead. The two ephemeral drainages within the project area do not support a riparian zone and do not provide habitat for aquatic species. The ephemeral streams are located in a sparsely vegetated desert, and carry only small amounts of organic matter downstream. Additionally, the flow path becomes significantly human altered with the flow path being in concrete-lined channels or conveyed through underground pipes, where no riparian zones exist. Therefore it is not likely that drainages at the project location would provide lifecycle support for fish or other aquatic species in Lake Mead. The two washes do not contribute pollutants downstream since potential pollutants have not been identified upstream or within the project area. The sediment filtering of the detention basins would have a similar effect on pollutants and organic matter. In addition, the constructed wetland cells at Clark County's Las Vegas Wash Wetland Park function to filter/remove nutrients and pollutants before being carried to Lake Mead.
- 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:

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.
	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: 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).
WA 	CLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH ITERS (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:
lde	ntify water body and summarize rationale supporting determination:
	vide 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.

E.

⁸See Footnote # 3.
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.

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: Washes 3 and 5 are non-RPW ephemeral drainages that are approximately 40 miles from the nearest TNW, Lake Mead. These once isolated drainages now flow through concrete-lined, and underground storm drains, passing through detention basins before reaching the nearest TNW. The drainages at the project location do not have a riparian zone and do not provide habitat for sensitive species. Flows from the project location are infrequent and likely only occur only a few times annually due to the small amount of annual precipitation in the region. The two washes at the project location do not have more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of Lake Mead, and therefore, they do not have a significant nexus to a TNW.
	☐ Other: (explain, if not covered above):
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> 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): 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): 10,020 linear feet (2.651 acres), 11.5' wide Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
SE	CTION IV: DATA SOURCES.
Α.	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. 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; Tule Springs Park USDA Natural Resources Conservation Service Soil Survey. Citation: Report Appendix A Custom Soil Survey Report 2017 National wetlands inventory map(s). Cite name: Report Appendix B Street Map and USGS Topo Map Base 2017 State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date): 2016 Google Earth aerial Other (Name & Date): Photos taken during August 18, 2017 Previous determination(s). File no. and date of response letter: SPK-2005-50517; Waters of the U.S. Jurisdictional Determination Report for Kyle Canyon Master Plan (PBS&J. August 2005), an Approved Jurisdictional
	Determination Report for Kyle Canyon Master Plan (PBS&J, August 2005), an Approved Jurisdictional Determination issued October 27, 2005 included Wash 3 and Wash 5. This 2005 AJD determined that Wash 3 and Wash 5 were jurisdictional Waters of the U.S. (WOUS). A standard permit was issued based on this determination, and mitigation was paid for impacts to downstream portions of these two ephemeral washes. It should be noted that this 2005 Jurisdictional Determination was made prior to the Rapanos court decision (2008) requiring WOUS to have a significant nexus with a TNW. Applicable/supporting case law: Applicable/supporting scientific literature: Other information (please specify):

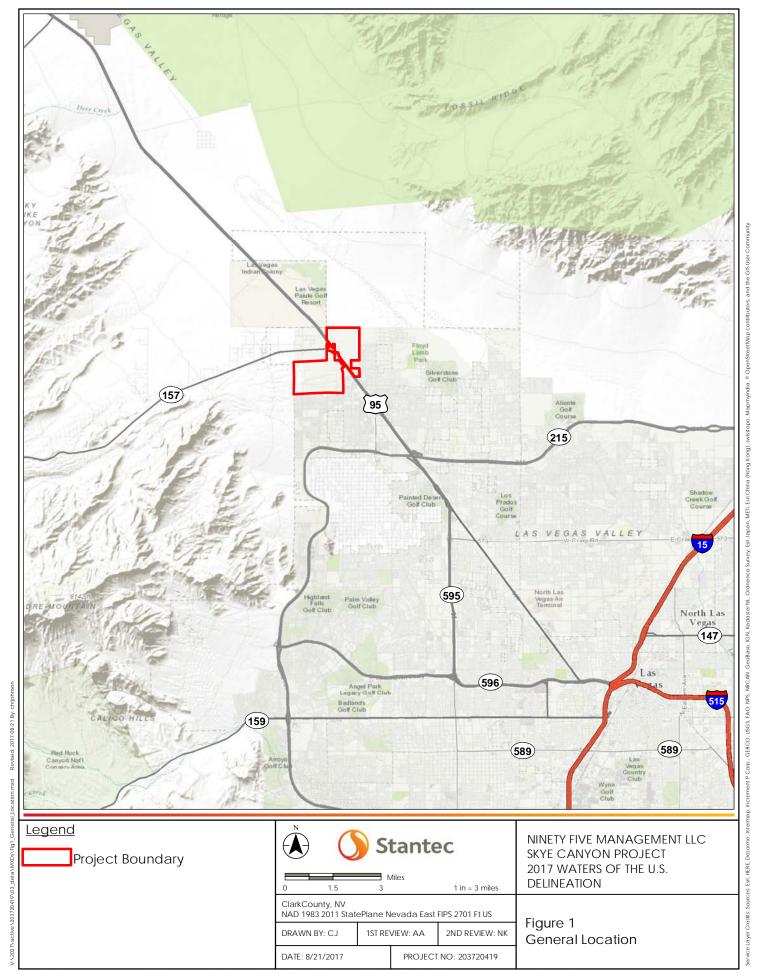
B. ADDITIONAL COMMENTS TO SUPPORT JD:

 Table 1
 Comparison of Precipitation at Kyle Canyon Detention Basin

2016					2017								
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Total
Normal Rainfall (Inches)	0.33	0.25	0.27	0.36	0.50	0.54	0.76	0.44	0.15	0.12	0.07	0.40	4.19
Kyle Canyon Detention Basin (Inches)	-	-	0.08	-	0.08	1.77	1.81	-	-	-	-	1.61	5.35

Table 2 Aquatic Resources in Study Area

Feature	Cowardin Code	Width (Feet)	Length (Feet)	Acres	Latitude	Longitude	Watershed
Wash 3	R6	10	6,091	1.398	36.316743	-115.328710	300 acres
Wash 5a	R6	12.5	3,200	0.918	36.311526	-115.328960	
Wash 5b	R6	20	729	0.335	36.313111	-115.318846	230 acres
Total			10,020	2.651			





DRAWN BY: AA

DATE: 8/21/2017

1st REVIEW: NK

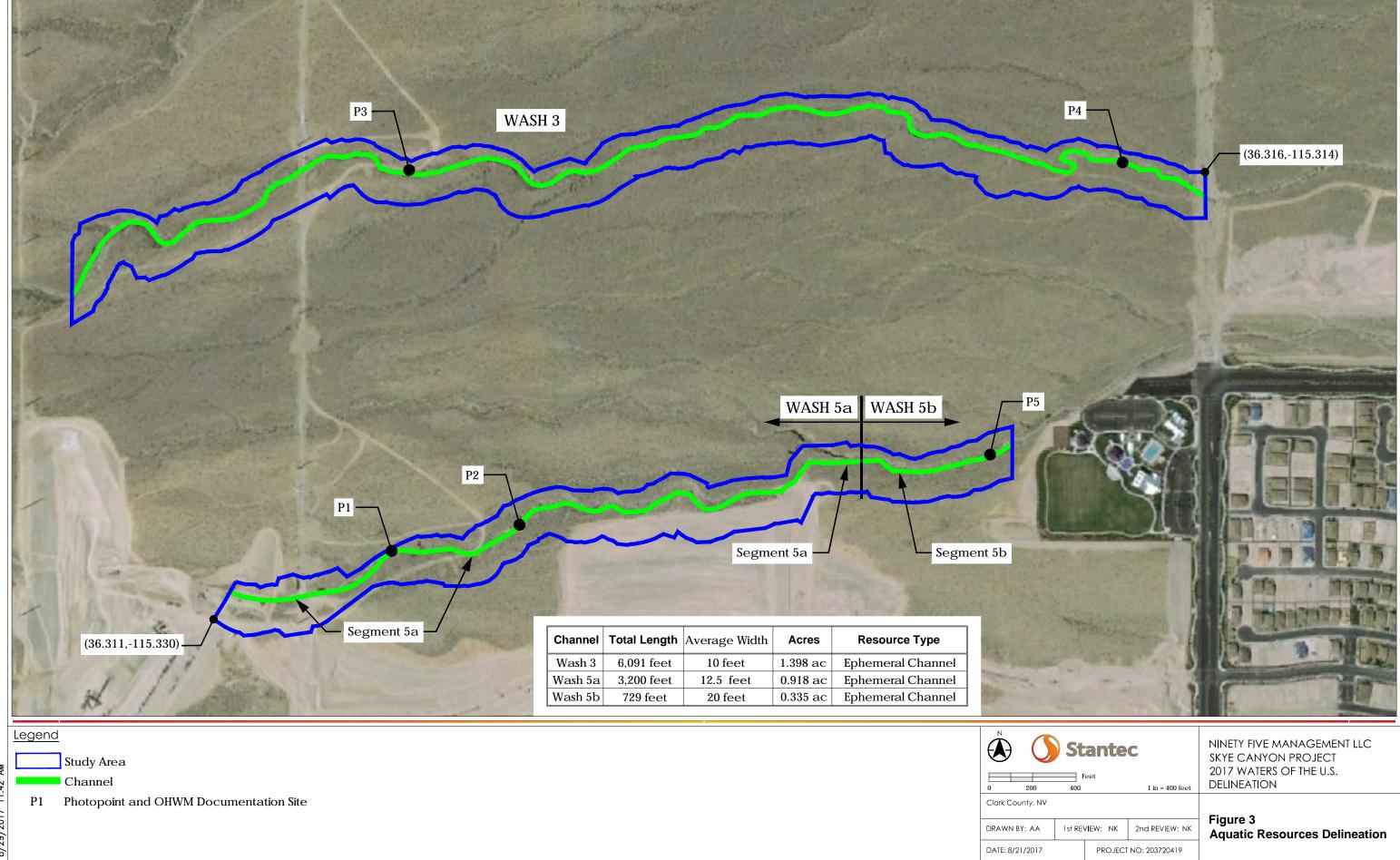
Service Layer Credits:

Figure 2

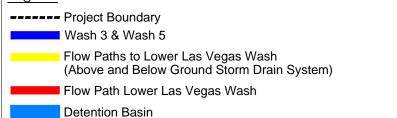
Study Area

2nd REVIEW: NK

PROJECT NO: 203720419



8/29/2017 11:42 AM





NINETY FIVE MANAGEMENT LLC SKYE CANYON PROJECT 2017 WATERS OF THE U.S. DELINEATION

Figure 4a
Detention Basins

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