APPROVED JURISDICTIONAL DETERMINATION FORM

	U.S. Army Corps of Engineers
JD Status: DRAFT	
SECTION I: BACKGROUND INFORMATION	
A. REPORT COMPLETION DATE FOR APPROVED JU	JRISDICTIONAL DETERMINATION (JD): 25-Feb-2009
B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sad	cramento District, SPK-2007-01668-SG-JD2
C. PROJECT LOCATION AND BACKGROUND INFOR	MATION:
State :	NV - Nevada
County/parish/borough:	Clark
City:	Mesquite
Lat:	
Long:	
Universal Transverse Mercator	Folder UTM List
	UTM list determined by folder location
	NAD83 / UTM zone 37S
	Waters UTM List
	UTM list determined by waters location
	NAD83 / UTM zone 37S
Name of nearest waterbody:	Virgin River
Name of nearest Traditional Navigable Water (TNW):	Lake Mead
Name of watershed or Hydrologic Unit Code (HUC):	15010010
Check if map/diagram of review area and/or potent	lai jurisdictional areas is/are available upon request.
Check if other sites (e.g., offsite mitigation sites, dis	sposal sites, etc¿) are associated with the action and are recorded on a different JD form.
D. REVIEW PERFORMED FOR SITE EVALUATION:	
✓ Office Determination Date: 24-Feb-2009	
Field Determination Date(s): 22-Sep-2008	
N.	,
SECTION II: SUMMARY OF FINDINGS	
A. RHA SECTION 10 DETERMINATION OF JURISDIC	TION
There [] "navigable waters of the U.S." within Rivers an	d Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.
Waters subject to the ebb and flow of the t	tide.
Waters are presently used, or have been u	used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain:	
Ехріаііі.	
B. CWA SECTION 404 DETERMINATION OF JURISDI	CTION.
There [1] "waters of the U.S." within Clean Water Act (0	CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.
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1. Waters of the U.S.	
a. Indicate presence of waters of U.S. in review area:1	
Water Name W	ater Type(s) Present
	at flow directly or indirectly into TNWs
	at flow directly or indirectly into TNWs
, ,	at flow directly or indirectly into TNWs
SPK200701666F Wellands adjacent to but not directly	y abutting RPWs that flow directly or indirectly into TNWs
b. Identify (estimate) size of waters of the U.S. in the re	eview area:
Area: 12181.04 (m²)	
Linear: (m)	
c. Limits (boundaries) of jurisdiction:	
based on: 1987 Delineation Manual.	
OHWM Elevation: (if known)	
,	
2. Non-regulated waters/wetlands: ³	
Detentially inviediational waters and/or waters do were	assessed within the review area and determined to be not jurisdictional. Explain:
Potentially jurisdictional waters and/or wettands were	assessed within the review area and determined to be not jurisdictional. Explain.
	N .
SECTION III: CWA ANALYSIS	
A. TNWs AND WETLANDS ADJACENT TO TNWs	
V THE TELEVISION OF THE PROPERTY OF THE PROPER	,
1.TNW	
Not Applicable.	
2. Wetland Adjacent to TNW	
Not Applicable.	
B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT	A TNW) AND ITS ADJACENT WETLANDS (IF ANY):
,	• •

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

https://orm.usace.army.mil/orm2/f?p=106:34:2002319314796620::NO::APP_FORM_ID:1... 2/25/2009

(i) General Area Conditions:

2070 square miles Watershed size: Drainage area: .48 square miles Average annual rainfall: 5 inches Average annual snowfall: 0 inches

(ii) Physical Characteristics (a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through [] tributaries before entering TNW.

:Number of tributaries

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

Project waters are 25-30 river miles from RPW.

Project Waters are 1 (or less) 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
Virgin River flows directly into Lake Mead - wetlands are either abutting or adjacent with seasonal surface water connections.

Tributary Stream Order, if known:

Not Applicable.

(b) General Tributary Characteristics:

Tributary is: Not Applicable

Tributary properties with respect to top of bank (estimate): Not Applicable.

Primary tributary substrate composition:

Tributary (conditions, stability, presence, geometry, gradient):

Not Applicable

(c) Flow: Not Applicable

Surface Flow is:

Subsurface Flow: Not Applicable.

Tributary has:

Not Applicable.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by: Not Applicable.

Mean High Water Mark indicated by: Not Applicable.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality;general watershed characteristics, etc.).

Not Applicable.

(iv) Biological Characteristics. Channel supports:

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

(i) Physical Characteristics: (a) General Wetland Characteristics:

Properties:				
Wetland Name	Size (Acres)	Wetland Type	Wetland Quality	Cross or Serve as State Boundaries. Explain
SPK200701668C	.75	The wetlands associated with the Virgin River were predominantly scrub-shrub and emergent with Salix, Typha and Juncus species. Salt Cedar is also found throughout the wetland and upland areas.	Moderate - based on occurrence of salt cedar as a dominant plant species. This riparian corridor is considered very important regionally because of its high diversity in biodiversity.	The project area extends to the Nevada-Arizona border. The wetlands do extend across state lines.
SPK200701668D	.75	-	-	-
SPK200701668E	.75		-	

(b) General Flow Relationship with Non-TNW: Flow is:

Wetland Name	Flow	Explain
SPK200701668C	Intermittent flow.	-

Surface flow is:

Wetland Name	Flow	Characteristics
SPK200701668C	Discrete and confined	Wetlands receive some overland sheet flow but most of the water source is from high flow events and probably from some groundwater.
SPK200701668D	-	-
SPK200701668E	-	-

Subsurface flow:

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
SPK200701668C	Unknown	Geotechnical report for the B-89 bridge replacement project directly downstream of the project area indicated that groundwater is within 4-6 feet of the river bottom.	-
SPK200701668D	-	-	-
SPK200701668E	-	-	-

(c) Wetland Adjacency Determination with Non-TNW:

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
SPK200701668C	Yes	-	-	-
SPK200701668D	No	-	-	-
SPK200701668E	No	-	-	-

(d) Proximity (Relationship) to TNW:

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
SPK200701668C	30 (or more)	1 (or less)	Wetland to navigable waters	2-year or less
SPK200701668D	-	-	-	-
SPK200701668E	-	-	-	-

(ii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Wetland Name	Explain	Identify specific pollutants, if known
SPK200701668C	-	Urban stormwater run-off most likely contains fertilzers, pesticides, herbicides, gas, oil, hydraulic fluids, etc.
SPK200701668D	-	
SPK200701668E	-	-

(iii) biological Characteristics. Wetland supports.							
Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain			
SPK200701668C	X	Up to 800-ft wide in places	X	Mostly scrub-shrub with some emergent. Salix was dominant at some test locations. (60%)			
SPK200701668D	-	-	-				
SPK200701668E		-		-			

Habitat for:

Wetland Name	Habitat	Federally Listed Species	Explain Findings	Spawn Area	Explain Findings	Other Environmentally Sensitive Species	Explain Findings	Aquatic\Wildlife Diversity	Explain Findings
SPK200701668C	x	X	Several species of listed fish are endemic to the Virgin River system - Virgin River chub (Gila seminuda) and woundfin (Plagopterus argentissimus)	x	See above - this area contains listed fish species.	·	-	х	The Virgin River is considered to be one of the most important river systems in the arid west. It provides habitat for a large number of species, some of which are endemic. The narrow band of riparian vegetation is one of the last remaining areas in which the southwester willow flycatcher is known to nest.
SPK200701668D	-	-	-	-	-	-	-	-	-
SPK200701668E	-	-	-	-	-	-	-	-	-

3. Characteristics of all wetlands adjacent to the tributary (if any):

All wetlands being considered in the cumulative analysis:

Wetland Name	Directly Abuts	Size (Area) (m ²)
SPK200701668F	No	1740.14808
Total:		1740.14808

Summarize overall biological, chemical and physical functions being performed:

Wetland Name	Functional Summary
SPK200701668F	-

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 its adjacent wetland or between a tributary and its adjacent wetland or between a function of significant nexus.

Findings for: SPK200701668C, SPK200701668D, SPK200701668E, SPK200701668F
During high water and/or flood events, these wetlands have a surface water connection to the Virgin River. They are within the 100-year floodplain and have the opportunity to provide organic matter inputs into the Virgin River. They also provide important habitat for riparian and wetland dependent species. The wetlands have the potential to capture pollutants which might otherwise flow directly into

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:

Not Applicable

2. RPWs that flow directly or indirectly into TNWs: Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

3. Non-RPWs that flow directly or indirectly into TNWs:8

Provide estimates for jurisdictional waters in the review area:

Not Applicable

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

Wetland Name	Flow	Explain
SPK200701668C	SEASONAL	Wetland receives water during high flow events.

Provide acreage estimates for jurisdictional wetlands in the review area:

Wetland Name	Туре	Size (Linear) (m)	Size (Area) (m²)
SPK200701668C	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	3035.142
SPK200701668D	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	3035.142
SPK200701668E	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	3035.142
Total:		0	9105.426

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:

Provide acreage estimates for jurisdictional wetlands in the review area:

Wetland Name	Туре	Size (Linear) (m)	Size (Area) (m ²)
SPK200701668F	Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs	-	1740.14808
Total:		0	1740.14808

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:

Provide estimates for jurisdictional wetlands in the review area: Not Applicable.

7. Impoundments of jurisdictional waters:9

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: 10

Not Applicable

Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

F.	NON-JURISDICTIONAL	WATERS.	INCLUDING W	ETLANDS

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 soley 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):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:

Not Applicable.

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. Not Applicable.

SECTION IV: DATA SOURCES. A. SUPPORTING DATA. Data reviewed for JD (listed items shall be included in case file and, where checked and requested, appropriately reference below): Not Applicable.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

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.

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.

An antural 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-lbid.

⁸⁻See Footnote #3.

 $^{^{\}rm 9}$ -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.