APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

| SECTION I: BACKGROUND INFORMATION | <u> </u> |
|--|--|
| A. REPORT COMPLETION DATE FOR APPROVED JU | JRISDICTIONAL DETERMINATION (JD): 15-Apr-2009 |
| B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sac | cramento District, SPK-2008-01345-JD1 |
| C. PROJECT LOCATION AND BACKGROUND INFOR | MATION: |
| State: | NV - Nevada |
| County/parish/borough: | Lincoln |
| City: | Caliente |
| Lat: | |
| Long: | |
| Universal Transverse Mercator | Folder UTM List |
| | UTM list determined by folder location NAD83 / UTM zone 11N |
| | Waters UTM List Waters UTM List |
| | UTM list determined by waters location |
| | NAD83 / UTM zone 11N |
| Name of nearest waterbody: | Meadow Valley Wash |
| Name of nearest Traditional Navigable Water (TNW): | Lake Mead |
| Name of watershed or Hydrologic Unit Code (HUC): | 15010013 |
| Check if map/diagram of review area and/or potent | ial 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: 15-Apr-2009 | |
| | |
| Field Determination Date(s): 01-Oct-2008 | |
| | , |
| SECTION II: SUMMARY OF FINDINGS | \ |
| SECTION II. SUMMART OF FINDINGS | |
| A. RHA SECTION 10 DETERMINATION OF JURISDIC | TION |
| There "navigable waters of the U.S." within Rivers and H | 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 | ide. |
| | used in the past, or may be susceptible for use to transport interstate or foreign commerce. |
| Explain: | |
| B. CWA SECTION 404 DETERMINATION OF JURISDI | CTION |
| | /A) jurisdiction (as defined by 33 CFR part 328) in the review area. |
| There makes on the old. That is really that of the | // janoulous (do domised b) so of the part of by in the review droat |
| | |
| 1. Waters of the U.S. | |
| a. Indicate presence of waters of U.S. in review area: | |
| | r Type(s) Present |
| Meadow Valley Wash Relatively Permanent Waters (F | RPWs) that flow directly or indirectly into TNWs |
| | |
| b. Identify (estimate) size of waters of the U.S. in the re | aviou aroa: |
| | with discu. |
| Area: (m²) Linear: (m) | |
| Linear. (III) | |
| c. Limits (boundaries) of jurisdiction: | |
| based on: | |
| OHWM Elevation: (if known) | |
| O New resoluted control to the dead of 3 | |
| 2. Non-regulated waters/wetlands: ³ | |
| Potentially jurisdictional waters and/or wetlands were | assessed within the review area and determined to be not jurisdictional. Explain: |
| | \ |
| SECTION III: CWA ANALYSIS | |
| A. TNWs AND WETLANDS ADJACENT TO TNWs | |
| N. Control of the Con | , |
| 4.7004 | |
| 1.TNW Not Applicable. | |
| riot / application | |
| 2. Wetland Adjacent to TNW | |
| Not Applicable. | |
| | |
| B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT | A TNW) AND ITS ADJACENT WETLANDS (IF ANY): |
| | n |
| Characteristics of non-TNWs that flow directly or inc | directly into TNW |
| (i) General Area Conditions: | |
| Watershed size: | |
| Drainage area: | |
| Average annual rainfall: inches | |
| Average annual snowfall: inches | |
| (m.p. 1.10) | |
| (ii) Physical Characteristics (a) Relationship with TNW: | |
| Tributary flows directly into TNW. | |
| | |
| | TAUA |
| Tributary flows through [] tributaries before entering | TNW. |
| | TNW. |
| Tributary flows through [] tributaries before entering | INW. |

Project Waters are aerial (straight) miles from TNW. Project waters are aerial(straight) miles from RPW.

Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:5

Tributary Stream Order, if known:

| Order | Tributary Name | |
|-------|--------------------|--|
| 3 | Meadow Valley Wash | |

(b) General Tributary Characteristics: Tributary is:

| Tributary Name | Natural | Artificial | Explain | Manipulated | Explain |
|--------------------|---------|------------|---------|-------------|--|
| Meadow Valley Wash | X | - | - | X | Affected by infrastructure - UPRR and SR 317 |

Tributary properties with respect to top of bank (estimate):

| Tributary Name | Width (ft) | Depth (ft) | Side Slopes |
|--------------------|------------|------------|-------------|
| Meadow Valley Wash | 10 | 1.5 | 2:1 |

Primary tributary substrate composition:

| Tributary Name | Silt | Sands | Concrete | Cobble | Gravel | Muck | Bedrock | Vegetation | Other |
|--------------------|------|-------|----------|--------|--------|------|---------|------------|-------|
| Meadow Valley Wash | X | Х | - | - | - | - | - | - | - |

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

| | | i i | | |
|--------------------|-------------------------------|---------------------------|------------|--------------|
| Tributary Name | Condition\Stability | Run\Riffle\Pool Complexes | Geometry | Gradient (%) |
| Meadow Valley Wash | Post flood, quasi equilibrium | Present, discrete | Meandering | 1 |

(c) Flow:

| Tributary Name | Provides for | Events Per Year | Flow Regime | Duration & Volume |
|--------------------|----------------|-----------------|---|-------------------|
| Meadow Valley Wash | Perennial flow | 2-5 | Average annual discharge varies between 2.6 cfs in September to 33 cfs in March | - |

Surface Flow is:

| Tributary Name | Surface Flow | Characteristics |
|--------------------|-----------------------|-----------------|
| Meadow Valley Wash | Discrete and confined | - |

Subsurface Flow:

| Tributary Name | Subsurface Flow | Explain Findings | Dye (or other) Test |
|--------------------|-----------------|------------------|---------------------|
| Meadow Valley Wash | Unknown | - | - |

Tributary has:

| Tributary Name | Bed & Banks | онwм | Discontinuous OHWM ⁷ | Explain |
|--------------------|-------------|------|------------------------------------|---------|
| Meadow Valley Wash | X | Х | - | - |

Tributaries with OHWM⁶ - (as indicated above)

| Tributary Name | OHWM | Clear | Litter | Changes in Soil | Destruction Vegetation | Shelving | Wrack Line | Matted\Absent Vegetation | Sediment Sorting | Leaf Litter | Scour | Sediment Deposition | Flow Events | Water Staining | Cha P |
|-----------------------|------|-------|--------|-----------------|---------------------------|----------|------------|-----------------------------|---------------------|-------------|-------|------------------------|-------------|-------------------|----------|
| Meadow Valley Wash | х | х | х | х | х | Х | - | - | × | - | х | х | х | - | |

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.).

| П | Tributary Name | Explain | identity specific pollutants, it known |
|---|--------------------|---|--|
| | Meadow Valley Wash | Under normal circumstances, water is clear. | None known but there are probably some agricultural inputs upstream. |
| | | | |

(iv) Biological Characteristics. Channel supports:

| Tributary Name Riparian Corridor | | Riparian Corridor Characteristics | | Characteristics | Habitat |
|----------------------------------|---|---|---|-----------------|---------|
| Meadow Valley Wash | X | stream channel supports a riparian corridor between 5 and 30 feet wide with willow and cottonwood | - | - | Х |

Habitat for: (as indicated above)

| Transaction (as indicated about) | | | | | | | | | |
|----------------------------------|---------|-----------------------------|------------------------------------|------------------|------------------|--|--------------------------------|----------------------------|----|
| Tributary Name | Habitat | Federally Listed Species | Explain Findings | Fish\Spawn Areas | Explain Findings | Other Environmentally Sensitive Species | Explain Findings | Aquatic\Wildlife Diversity | Ex |
| Meadow Valley Wash | х | Х | desert tortoise, willow flycatcher | - | - | X | Meadow Valley desert sucker | - | - |

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

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

Not Applicable

(b) General Flow Relationship with Non-TNW:

Not Applicable

Surface flow is:

Not Applicable

(c) Wetland Adjacency Determination with Non-TNW: Not Applicable.

(d) Proximity (Relationship) to TNW: Not Applicable.

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

(iii) Biological Characteristics. Wetland supports: Not Applicable.

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

All wetlands being considered in the cumulative analysis: Not Applicable.

Summarize overall biological, chemical and physical functions being performed: Not Applicable.

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 al 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 specula 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 intertuity 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 thresh (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 based.

Significant Nexus: Not Applicable

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:

| Wetland Name | Flow | Explain |
|--------------------|-----------|---------|
| Meadow Valley Wash | PERENNIAL | - |

Provide estimates for jurisdictional waters in the review area:

| Wetland Name | Туре | Size (Linear) (m) | Size (Area) (m²) |
|--------------------|---|-------------------|------------------|
| Meadow Valley Wash | Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs | 4023.36 | - |
| Total: | | 4023.36 | 0 |

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. Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

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: Not Applicable.

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

Provide estimates for jurisdictional wetlands in the review area:

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 WATERS:10

Not Applicable

Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area:

| F | NON-JURISDICTIONAL | WATERS | INCLUDING WETI | ANDS |
|---|--------------------|--------|----------------|------|

| 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, 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

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

--Other information

McQueary, P.L. - 2008 Site visit on October 1, 2008

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).

 $^{^{3}\}mbox{-Supporting documentation is presented in Section III.F.$

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.

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 OHWI 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.

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 I