

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

November 19, 2013.

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, Marigold Mine, SPK-1993-00627.

Name of water being evaluated on this JD form: See table at end of JD

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: **Nevada** County/parish/borough: **Humboldt** City: **Valmy**

Center coordinates of site (lat/long in degree decimal format):

Lat. **40.725133961°**, Long. **-117.17523132°**

Universal Transverse Mercator: **11 485201.72 4508259.82**

Name of nearest waterbody: **Cottonwood Creek**

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: **Humbolt River**

Name of watershed or Hydrologic Unit Code (HUC): **Middle Humboldt, Nevada, 16040105**

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: November 19, 2013.

Field Determination. Date(s): _____.

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 no** "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 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

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).

- 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 _____ width (ft) and/or _____ acres.

Wetlands: _____ acres.

c. Limits (boundaries) of jurisdiction based on: Established by OHWM. and 1987 Delineation Manual.

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: **There are two major drainages associated with the Marigold Mine project area, Trout and Cottonwood Creeks. Both drainages originate in the Battle Mountains and flow south to north through the project area. There have been three previous jurisdictional determinations done for the Marigold Mine. The past evaluations included an area of 10,480 acres. The current proposed mine expansion includes a total of 19,081 acres and also includes several isolated springs just outside the mine area but within the Plan of Operations (PoO). The three past determinations were for isolated, non-jurisdictional waters. Based on the PoO, Marigold Mine constructed an earthen dam in the Trout Creek drainage as part of the mine's stormwater management system. A 1-mile long culvert carries water from the earthen dam downstream to a private parcel located within the Marigold Mine Claim Block. A diversion redirects any additional seasonal flow from Trout Creek into the Cottonwood Creek Drainage. A second diversion downstream on Cottonwood Creek directs the combined flow of Trout and Cottonwood into an unnamed drainage west of the current Cottonwood Creek. All flows within the active channels of Trout and Cottonwood Creeks are now captured west of the mine and redirected into these diversion. Very little flow would be captured below the diversions and any surface flow outside of the mine project would be from run-off from rain and/or snow events. Cottonwood Creek is 37,050 linear feet within the project area and averages 4-ft wide. Evidence of an OHWM is lost just above I-80. There is no channel evident 3/4 mile north of the railroad tracks. Trout Creek is 4 to 5-ft wide and is approximately 46,800 linear feet in length (excluding the 1-mile piped section). Trout Creek retains OHWM characteristics up a point approximately 1.6 miles north of the railroad tracks (see Photos 13 and 14, Appendix C). Additional ephemeral drainage are found in the area east of the mine and collect into a single channel. There was no evidence of OHWM in this drainage or its tributaries. In the northern section of the mine project area, a number of ephemeral drainages were identified but only one showed evidence of an OHWM. This drainage was the result of a re-drilled well in 2010 that created on OHWM below the well site. The OHWM was lost above the point where the drainage reached I-80. The unnamed tributary that would receive the excess flow from Trout and Cottonwood Creeks was also evaluated and found that no OHWM was present below Marigold's Claim Block. Previously, three spring areas were identified within the PoO and were revisited in 2012. These sites are heavily impacted by grazing and although they met the three parameter test for wetlands, there are no downstream connections. Several sites were dry with evidence of heavy grazing and trampling from cattle. Only one spring contained dense vegetation and it was located within a fenced area. None of the waters or wetlands within the project area have a connection to a TNW.**

³ Supporting documentation is presented in Section III.F.
Version 2-8-08 Isolated & Non-Waters Only

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs: NOT APPLICABLE

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

C. SIGNIFICANT NEXUS DETERMINATION: NOT APPLICABLE

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE: NOT APPLICABLE

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):⁴

- 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 _____ width (ft).
- Other non-wetland waters: _____ acres.
Identify type(s) of waters: _____.
- Wetlands: _____ acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

- 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).
- Other: (explain, if not covered above): _____.

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 _____ width (ft).
- Lakes/ponds: _____ acres.
- Other non-wetland waters: _____ acres. List type of aquatic resource: _____.
- Wetlands: _____ acres.

⁴ 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.

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): 110,077 linear feet 3-5 width (ft).
- Lakes/ponds: _____ acres.
- Other non-wetland waters: _____ acres. List type of aquatic resource: _____.
- Wetlands: 2.02 acres.

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: JBR. 2012. Waters of the U.S. Reverification; Figure 1: Project location; Figure 2: Marigold Claim Block WOUS Index; Figures 3a-3f: 2012 WOUS Channel Data; Figures 4-8: Delineation of Springs.

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; NV-VALMY

USDA Natural Resources Conservation Service Soil Survey. Citation: _____.

National wetlands inventory map(s). Cite name: _____.

State/Local wetland inventory map(s): _____

FEMA/FIRM maps: _____.

100-year Floodplain Elevation is: _____ (National Geodetic Vertical Datum of 1929)

Photographs: Aerial (Name & Date): November 26, 2013 - Google Maps (ORM Database)
or Other (Name & Date): JBR. 2012. Waters of the U.S. Reverification. Appendix C: Photographs.

Photographs.

Previous determination(s). File no. and date of response letter: SPK-2002-25061 CORTEZ GOLD MINES; SPK-1993-00627 Marigold Mine, December 31, 2001; SPK-1993-00627 Marigold Mine; July 1, 2002; SPK-1993-00627 Marigold Mine; December 31, 2007; SPK-2012-00964 Copper Basin, December 14, 2012.

Applicable/supporting case law: _____.

Applicable/supporting scientific literature: U.S. Department of the Interior, Bureau of Land Management. 2002. Phoenix Project: final Environmental Impact Statement. Available on line: http://www.blm.gov/pgdata/etc/medialib/blm/nv/field_offices/battle_mountain_field/blm_information/nea/phoenix_project0.Par.15411.File.dat/Introduction.pdf.

Other information (please specify): _____.

B. ADDITIONAL COMMENTS TO SUPPORT JD: Cottonwood and Trout Creeks originate in the Battle Mountains and flow north toward the Reese and Humboldt Rivers. Throughout the reaches of both creeks, there are areas where there is no evidence of flow and the creeks virtually disappear. Past determinations have indicated that both creeks end as they reach flat land and there are no differences in vegetation between adjacent areas and what would be the creek bed. North of I-80, obvious OHWM continues to diminish until no evidence of a channel is found. Typical stream morphology is that as a stream moves downstream and continues to merge with other tributaries, it becomes wider. This is not the case with Trout and Cottonwood Creeks. As the reach the flat, valley floor, both streams become narrower and shallow until they

fade completely. As per information from past determinations, the Humboldt River in the area downstream of the proposed project area appears to be a recharge area and is losing and not gaining water. Trout and Cottonwood Creeks most likely have no hydrologic connection to the Humboldt River because of evapo-transpiration and infiltration. The depth to groundwater is believed to be in excess of 35-feet so it is unlikely that the creeks contribute to recharge. The area is relatively remote with limited services and virtually no water-dependent activities. The Corps found no evidence of interstate commerce within the Ralston Valley and concluded that the drainages associated with the Marigold Mine Project are all intrastate, isolated waters located in a closed basin and are therefore non-jurisdictional.