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

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): October 30, 2014
- B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, H. Lima Mine Company Project, SPK-2009-00116

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: California County/parish/borough: Kern City: N/A

Center coordinates of site (lat/long in degree decimal format): Lat. 35.20282°, Long. -118.49606°

Universal Transverse Mercator: 11 363814.98 3896560.45

Name of nearest waterbody: Tehachapi Creek and Caliente Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: $\ensuremath{\text{N/A}}$

- Name of watershed or Hydrologic Unit Code (HUC): Middle Kern-Upper Tehachapi-Grapevine. California., 18030003
- 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 30, 2014
 □ 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
 - 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: There are approximately 3,841 linear feet of an unnamed ephemeral drainage located within the review area. This feature has been identified as a "Natural Drainage" and is a headwater stream flowing offsite to Tehachapi Creek. The total mapped length of the tributary including the reach upstream and downstream of the review area is approximately 2.20 miles. Tehachapi Creek is located approximately 1.1 miles downstream of the review area. Tehachapi Creek flows northwest approximately 11.44 miles to

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.

Caliente Creek. Caliente Creek flows west approximately 16.99 miles to the terminus at Malaga Road, two miles east of the town of Lamont.

An approved jurisdictional determination was made on August 24, 2009. This determination was for the same site and waters and expired on August 24, 2014. The single water feature was determined to be isolated and non jurisdictional under Section 404 of the CWA. The conditions on the site and in the downstream waters have not changed since this determination was made.

On May 8, 2014, a site visit was conducted to determine whether there is a hydrologic connection from the terminus of Caliente Creek at Malaga Road to the wetland adjacent to East Side Canal. Based on the attached site photographs, there are no ditches along either side of Malaga Road, Mountain View Road, or Edison Road, to convey normal flows from Caliente Creek. In addition, no culverts or pipes were found at the terminus of Caliente Creek with Malaga Road to convey normal flows underground. Based on the enclosed newspaper articles, a storm drain system, including detention basins, have been constructed along Caliente Creek. In addition, as shown on the enclosed FEMA flood maps, during a 100-year flood event, the area surrounding Caliente Creek may be subject to flood depth of 1-3 feet.

The following information regarding the flows through the flood control system and historic floods comes from personal communication with Aaron Leicht, Supervising Engineer Flood/Drainage/Grading, Kern County, on October 29, 2014. In approximately the 10-year event, flood waters reach Malaga Road and split approximately 50/50 to the north and south. Flows follow Malaga Road to north to Mountain View Road and to the south to Panama Road. The flows then turn west along these roads and continue to the East Side Canal. Several detention basins are constructed along the East Side Canal to hold the flood waters. The flood control system is designed to keep flood waters from entering either the Arvin Edison Canal or the East Side Canal due to the sediment load that the flood waters carry. These canals carry irrigation water to the south from the Kern River. Water within these canals does not reach a navigable water. During larger events, such as 1976 and 1983, the flood waters exceeded the capacity of the levees and basins, entering the canals and flooding the towns of Lamont and Arvin. Flood waters eventually drained south west to the Kern Lake bed, a dry terminal lake bed.

Based on the above information, we have determined that Caliente Creek is an intrastate isolated water with no apparent interstate or foreign commerce connection. Therefore, the 3,841 linear feet of an unnamed ephemeral drainage located within the review area, which is hydrologically connected to Caliente Creek through Tehachapi Creek, is an intrastate isolated water with no interstate or foreign commerce connection and therefore is not currently regulated.

SECTION III: CWA ANALYSIS

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: Pick List Drainage area: Pick List Average annual rainfall: inches Average annual snowfall: inches
 - (ii) Physical Characteristics:

Tributary is:

(a) <u>Relationship with TNW:</u>
 ☐ Tributary flows directly into TNW.
 ☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW. Project waters are **Pick List** river miles from RPW. Project waters are **Pick List** aerial (straight) miles from TNW. Project waters are **Pick List** aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):

Natural
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain:

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

 Average width:
 feet

 Average depth:
 feet

 Average side slopes:
 Pick List.

Primary tributary substrate composition (check all that apply):

	□ Sands
Cobbles	Gravel
Bedrock	Vegetation. Type/% cover:
Other. Explain:	

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Presence of run/riffle/pool complexes. Explain: Tributary geometry: **Pick List** Tributary gradient (approximate average slope): %

 (c) <u>Flow:</u> Tributary provides for: **Pick List** Estimate average number of flow events in review area/year: **Pick List** Describe flow regime: Other information on duration and volume:

Surface flow is: Pick List. Characteristics:

Muck

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.

		Subsurface flow: Pick List . Explain findings:	
		Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank the presence of litter and debris changes in the character of soil destruction of terrestrial vegetation shelving the presence of wrack line vegetation matted down, bent, or absent sediment sorting leaf litter disturbed or washed away scour sediment deposition multiple observed or predicted flow events water staining abrupt change in plant community 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: oil or scum line along shore objects survey to available datum; fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): 	
	 (iii) Chemical Characteristics: Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Identify specific pollutants, if known: 		
 Riparian corridor. C Wetland fringe. Cha Habitat for: Federally Listed Fish/spawn area Other environmetical 		Biological 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	characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
	(i)	Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:	
		(b) <u>General Flow Relationship with Non-TNW</u> : Flow is: Pick List . Explain:	
		Surface flow is: Pick List Characteristics:	
		Subsurface flow: Pick List . Explain findings:	

(c) <u>Wetland Adjacency Determination with Non-TNW:</u> Directly abutting

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. ⁷Ibid.

Not directly abutting

Discrete wetland hydrologic connection. Explain:

- Ecological connection. Explain:
- Separated by berm/barrier. Explain:
- (d) <u>Proximity (Relationship) to TNW</u> Project wetlands are <u>Pick List</u> river miles from TNW. Project waters are <u>Pick List</u> aerial (straight) miles from TNW. Flow is from: <u>Pick List</u>. Estimate approximate location of wetland as within the <u>Pick List</u> floodplain.
- (ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) Biological Characteristics. Wetland supports (check all that apply):

- Riparian buffer. Characteristics (type, average width):
- □ Vegetation type/percent cover. Explain:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

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

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 following:

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

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:

- Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into 1. TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 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:
- Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain 3. 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): wide.

- Tributary waters: linear feet
- Other non-wetland waters: acres.
 - Identify type(s) of waters:

Non-RPWs⁸ that flow directly or indirectly into TNWs. 3.

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:
- U 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.

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

U 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.

⁸See Footnote # 3.

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).

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):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:

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, wide.

Other non-wetland waters: acres.

Identify type(s) of waters: acres.

Wetlands:

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: 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): 3,841 linear feet.

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): linear feet. wide.

- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource:
- Wetlands: acres.

SECTION IV: DATA SOURCES.

- SUPPORTING DATA. Data reviewed for JD (check all that apply checked items shall be included in case file and, Α. where checked and requested, appropriately reference sources below):
 - \boxtimes 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:

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.

Corps havigable waters study.
U.S. Geological Survey Hydrologic Atlas:
USGS NHD data.

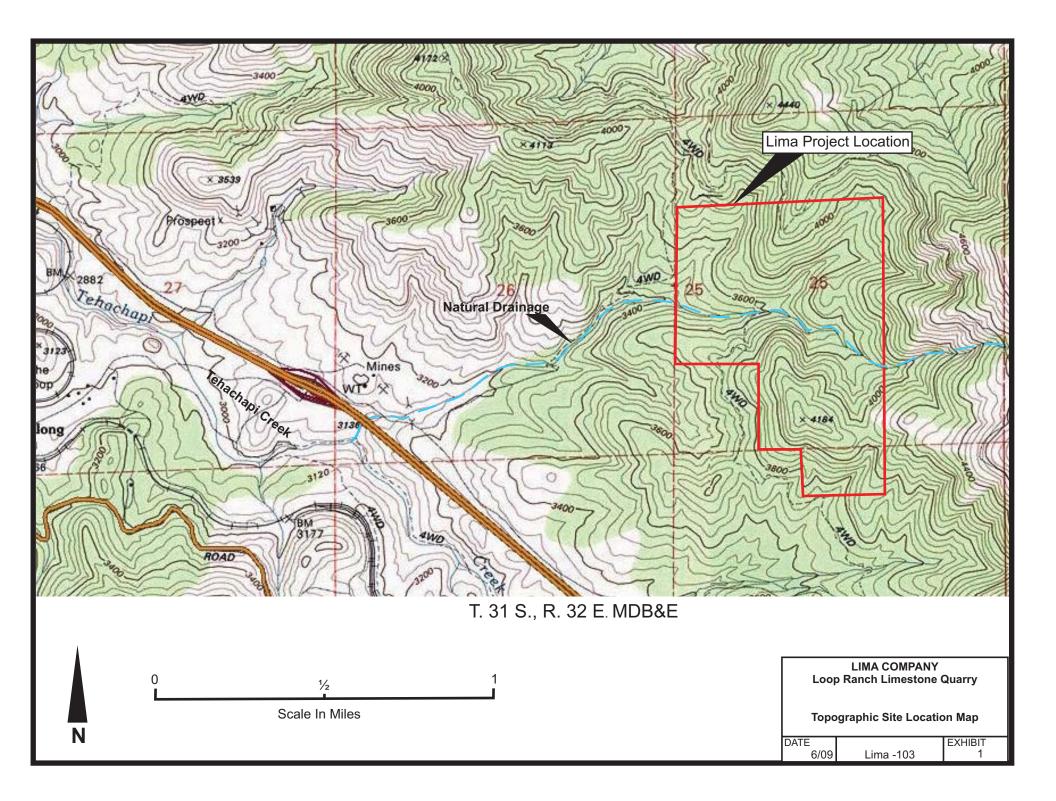
USGS 8 and 12 digit HUC maps.

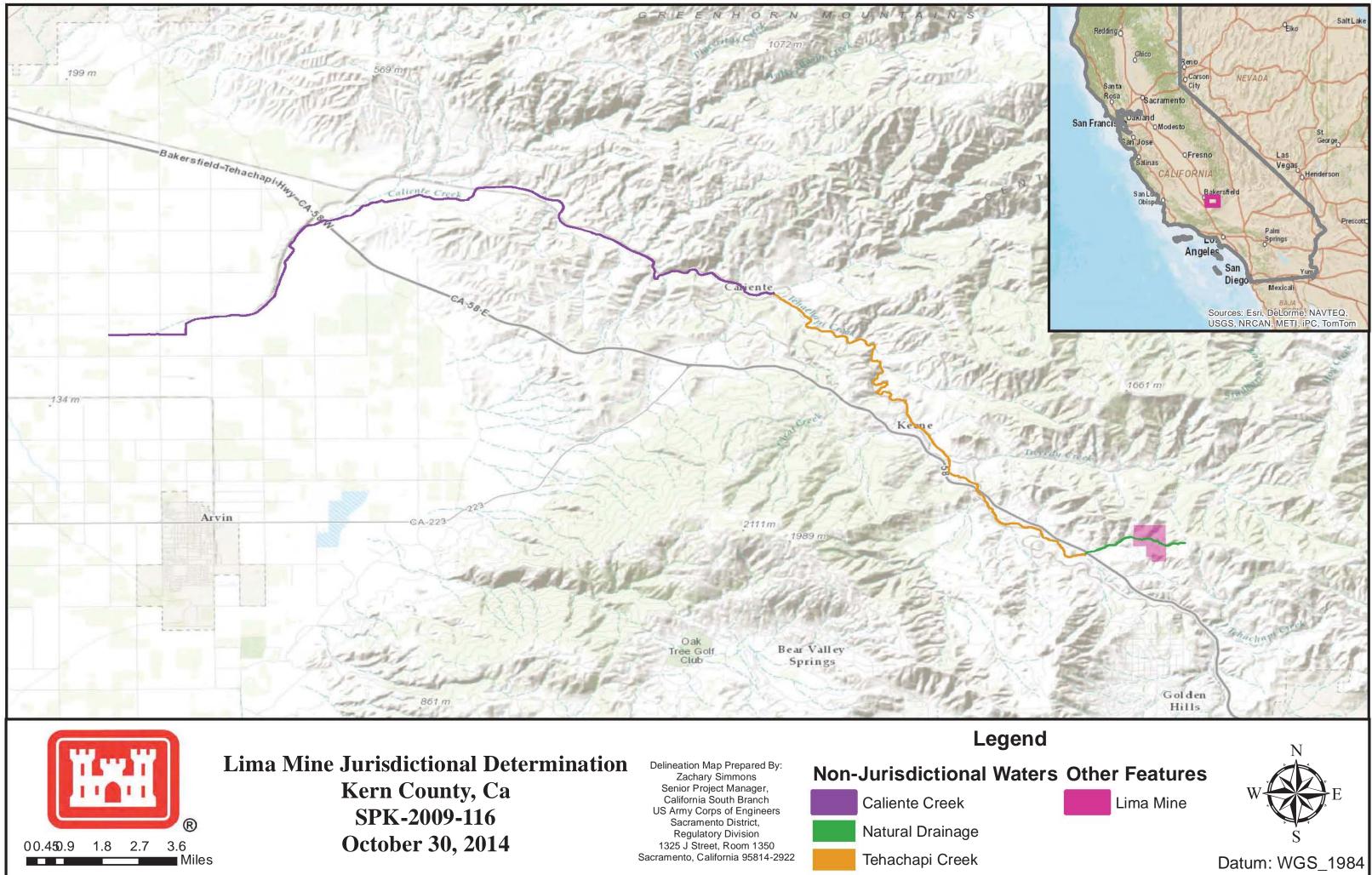
- U.S. Geological Survey map(s). Cite scale & quad name: 1:24K; CA-KEENE
- USDA Natural Resources Conservation Service Soil Survey. Citation:
- National wetlands inventory map(s). Cite name:
- State/Local wetland inventory map(s):
- FEMA/FIRM maps: FIRN Map, Kern County, California, map numbers: 06029C2350E, effective September 26, 2008, and 06029C2325E, effective September 26, 2008
 - 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date):

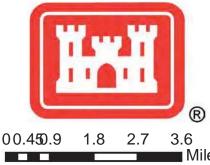
or 🖾 Other (Name & Date): May 8, 2014, site visit photographs taken by Mr. Jamie Robb, USACE 🖾 Previous determination(s). File no. and date of response letter: SPK-2009-00116, August 24, 2009. This

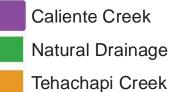
- determination was for the same site and waters and expired on August 24, 2014. The single water feature was determined to be isolated and non jurisdictional under Section 404 of the CWA. The conditions on the site and in the downstream waters have not changed since this determination was made.
- Applicable/supporting case law:
- Applicable/supporting scientific literature:
- Other information (please specify):
 - Newspaper Articles: February 9, 2006, Bakersfield Calfiornian; December 20, 2010, Bakersfield Now; December 21, 2010, Bakersfield Californian;
 - Personal Communication between Aaron Leight, Supercising Engineer Flood/Drainage/Grading, Kern County, and Mr. Zachary Simmons, Senior Project Manager, USACE.
- B. ADDITIONAL COMMENTS TO SUPPORT JD:

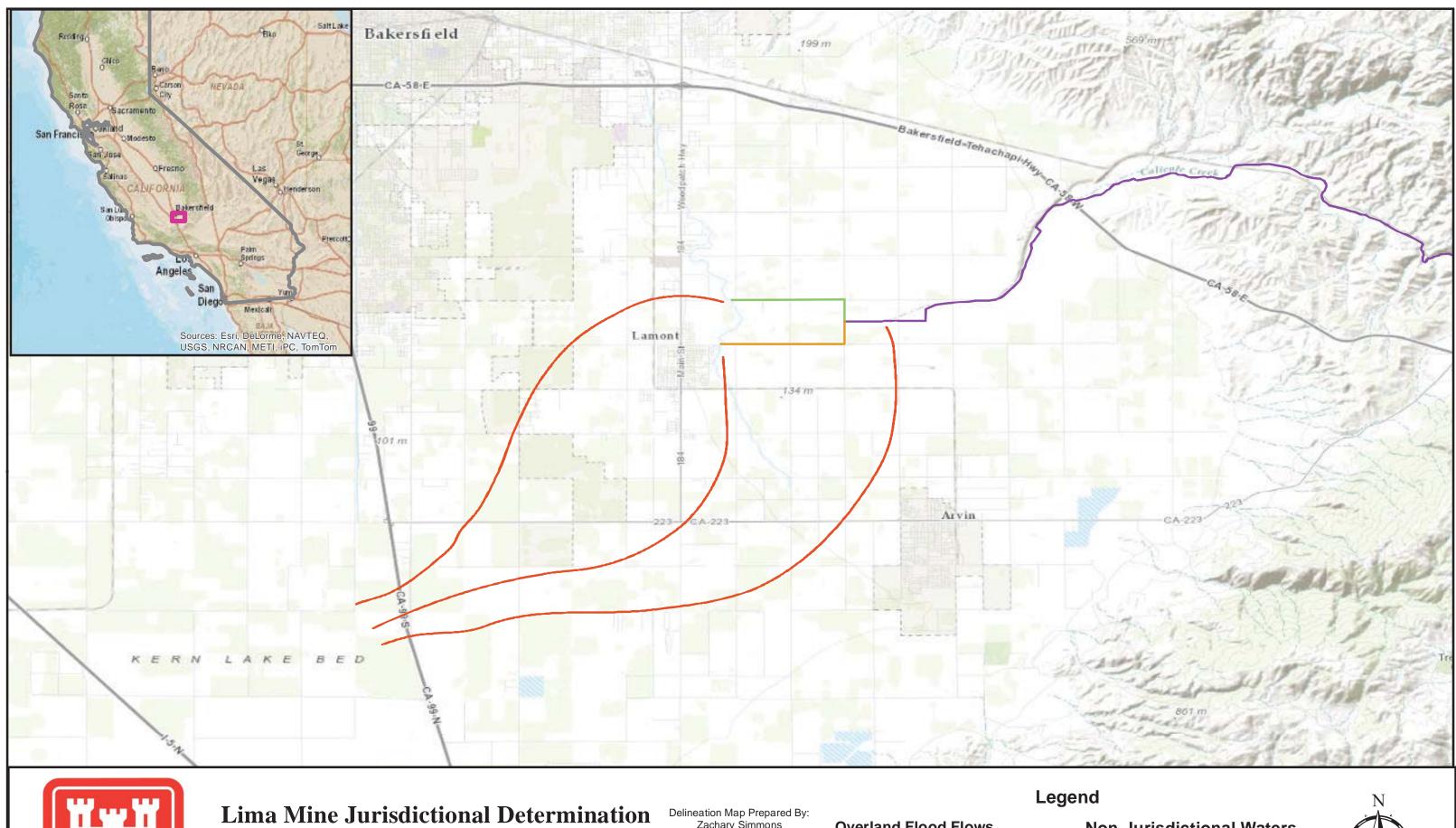
See Section II(B)(2)











Kern County, Ca SPK-2009-116 October 30, 2014

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Zachary Simmons Senior Project Manager, California South Branch US Army Corps of Engineers Sacramento District, **Regulatory Division** 1325 J Street, Room 1350 Sacramento, California 95814-2922

Overland Flood Flows

North to Mountain View Rd

Overland Flows to Kern Lake Bed

South to Las Palmas Rd

Non-Jurisdictional Waters

Caliente Creek



NOTES TO USERS

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detailed information in access where Base Flood E sodwarys hvor been learner learn are including in innered in and Hockwar. Data and/or Summary of Statistics Environment within the Rocol Insurance Study (ESI (eport that) accentrations is should be availe that BFEs are intended for fixed insurance only and should not be used as the webs source of fico point. According's, Nood wherehow data prevance in the FS

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It in Special Flood Hazard Areas may be protected by floo res. Refer to Section 2.4. "Flood Protection Measures" is ince Study report for information on flood control structure et.

used in the preparation of this map was Universal Transverse zone 11. The **horizontal datum** was NADE3, GRS1980 cross in datum, spheroid, projection or UTM zones used in FIRMs for adjacent predictions may result in sight positional ap features across jurisdiction boundaries. These differences accuracy of this FIRM.

accuracy of two server, on this map are referenced to the North American Vertical These flood elevatories must be compared to structure and is referenced to the same vertical datum. For information sin between the National Geodetic Vertical Datum of 1929 American Vertical Datum of 1938, visit the National Geodetic

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phase contact the inter-urvey at (301) 713-3242.

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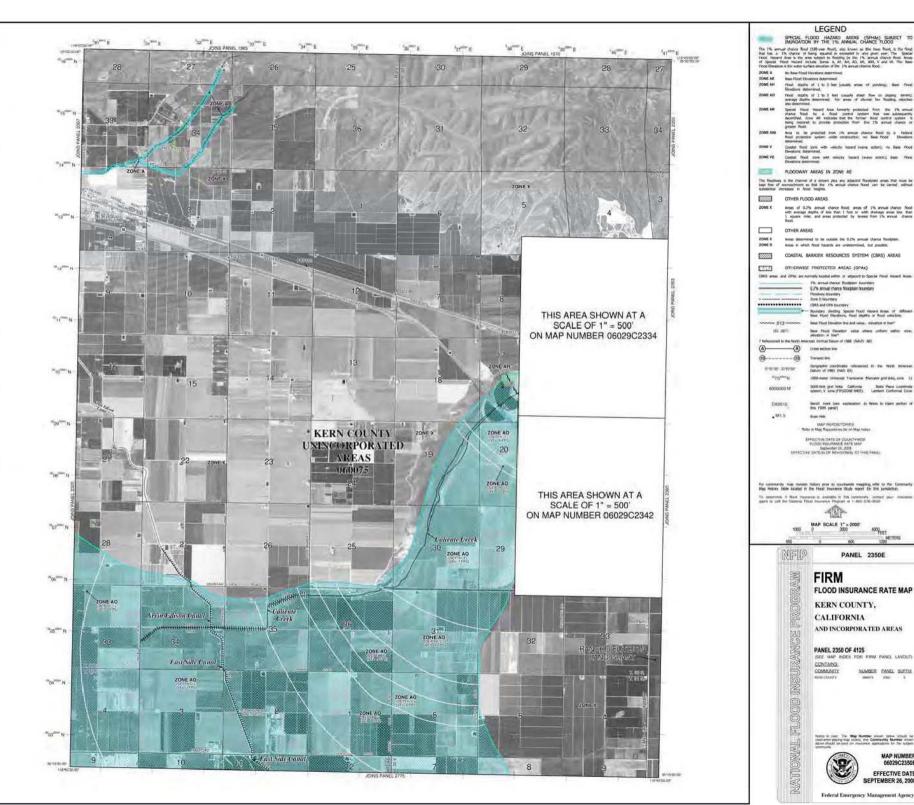
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A Map Service Center #1-600-358-9518 to inform m essociated with the FRM Analette products may d latters of Map Charge, a Food instrumma State torred the english FRM Map Service Center may at 1-600-358-9520 and its websits at http://www.mac.fe

eations about this map or questions concerning the Nation frogram in general, please call T-877-FEMA MAP (T-877-338-282 A website at http://www.dema.gov/.



LEGEND

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PANEL 2350E

FLOOD INSURANCE RATE MAP

AND INCORPORATED AREAS

NUMBER PANEL SUFFIX

MAP NUMBER

06029C2350E

EFFECTIVE DATE

SEPTEMBER 26, 2008 Federal Emergency Management Agency

0000719 200

KERN COUNTY.

CALIFORNIA

PANEL 2350 OF 4125 (SEE MAP INDEX FOR FIRM PANEL LAVOUT)

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CONTAINS: COMMUNITY

NOTES TO USERS

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Flood Elevations shown on this map apply only landward function. Vertical Datum of 1989 NAVD 83. Users of this aware that coacidal food elevations are also provided in the function Elevations table in the Flood Instance Study regort in Elevations shown in the Summary of Salivates Elevations used for construction and/or foodglain management purposes give frain the elevations shown on the FIRM.

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used in the preparation of this map was Universal Transverse zone 11. The horizontal datum was NADOS, GRS1990 moss in datum, spheroid, projection or UTM zones used in FIRMs for adjustent juridictions may result in elaight positional tap features across jurisdiction boundaries. These differences accuracy of this FIRM.

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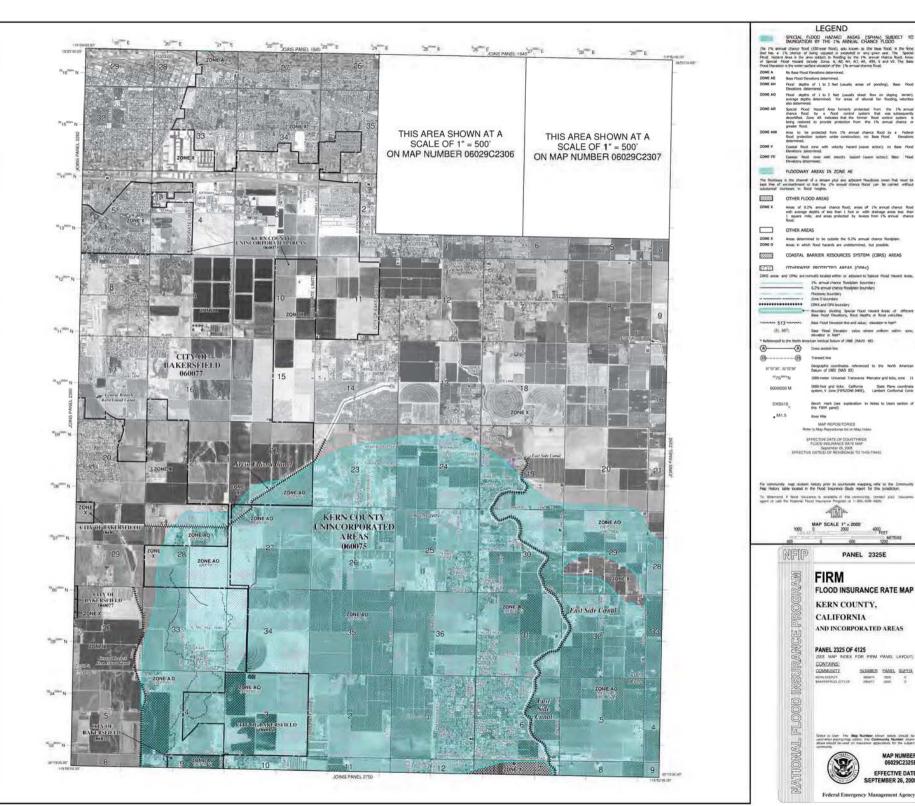
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separately printed Map Index for an overview map of th layout of map panels; community map repository addresses

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bitions about this map or questions concerning the Nation regram in general, please call 1-877-FENA MAP (1-877-206-392 A website at http://www.fema.gov/.



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PANEL LAYCAT

MAP NUMBER

EFFECTIVE DATE

SEPTEMBER 26, 2008 Federal Emergency Management Agency

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PANEL 2325E

FLOOD INSURANCE RATE MAP

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KERN COUNTY,

CALIFORNIA AND INCORPORATED AREAS

PANEL 2325 OF 4125

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(SEE MAP INDEX FOR FIRM CONTAINS: COMMUNITY



Photograph 1: Project: Bena Sanitary Landfill (SPK-2014-00236) Taken By: James Robb, USACE Date: May 8, 2014

View looking from Malaga Road to the east at Caliente Creek. Caliente Creek ends at Malaga Road. There are not culverts or other evidence of a hydrologic connection with Caliente Creek to navigable waters.



Photograph 2: Project: Bena Sanitary Landfill (SPK-2014-00236) Taken By: James Robb, USACE Date: May 8, 2014

View looking from Malaga Road to the northast at Caliente Creek. Caliente Creek ends at Malaga Road. There are not culverts or other evidence of a hydrologic connection with Caliente Creek to navigable waters.



Photograph 3: Project: Bena Sanitary Landfill (SPK-2014-00236) Taken By: James Robb, USACE Date: May 8, 2014

View looking from Malaga Road to the south-east at Caliente Creek. Caliente Creek ends at Malaga Road. There are not culverts or other evidence of a hydrologic connection with Caliente Creek to navigable waters.



Photograph 4: Project: Bena Sanitary Landfill (SPK-2014-00236) Taken By: James Robb, USACE Date: May 8, 2014

View looking south along the east shoulder of Malaga Road from the first power pole north of Caliente Creek. There is no drainage ditch along the road. Caliente Creek does not flow through a drainage ditch along the eastern side of Malaga Road to the north. During high flows, Malaga Road may flood with water from Caliente Creek.



Photograph 5: Project: Bena Sanitary Landfill (SPK-2014-00236) Taken By: James Robb, USACE Date: May 8, 2014

View looking south along the east shoulder of Malaga Road from the first power pole north of Caliente Creek. There is no drainage ditch along the road. Caliente Creek does not flow through a drainage ditch along the eastern side of Malaga Road to the north. During high flows, Malaga Road may flood with water from Caliente Creek.



Photograph 6: Project: Bena Sanitary Landfill (SPK-2014-00236) Taken By: James Robb, USACE Date: May 8, 2014

View looking north from the intersection of Malaga Road and Mountain View Road, approximately ½ mile to the north of the end of Caliente Creek There is no drainage ditch along the north or south sides of Mountain View Road to the east or west.



Photograph 7: Project: Bena Sanitary Landfill (SPK-2014-00236) Taken By: James Robb, USACE Date: May 8, 2014

View looking east at the shoulder of Mountain View Road, west of the location in Photograph 6. south along the east shoulder of Malaga Road from the first power pole north of Caliente Creek. There is no drainage ditch along the north or south sides of Mountain View Road to the east or west.



Photograph 8: Project: Bena Sanitary Landfill (SPK-2014-00236) Taken By: James Robb, USACE Date: May 8, 2014

View looking west from the east side of Edison Road, approximately ½ mile north of Mountain View Road. There is no drainage ditch located along the east or west sides of Edison to carry flows from Caliente Creek to the ditch shown in this photographs.



Photograph 9: Project: Bena Sanitary Landfill (SPK-2014-00236) Taken By: James Robb, USACE Date: May 8, 2014

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Photograph 9: Project: Bena Sanitary Landfill (SPK-2014-00236) Taken By: James Robb, USACE Date: May 8, 2014

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Thursday, Feb 09 2006 04:05 PM

Lamont should brace for future flood waters

By STUART PYLE

With winter coming on, it seems a little rain would be a good thing for Kern County. But then I think about a possible five inch rain centere over Caliente Creek, like the one in Los Angeles recently. I worry about what might happen in Lamont.

Even though Kern County has made expensive improvements to some areas where Lamont gets flooded, some changes made at th Tamarisk levee-dam have created a disaster waiting to happen.

Over the past three years, the county has spent about \$8 million on three flood projects for Lamont that give more storage for flood wate coming down Panama Road, open up the drain ditches on the west side of the tracks on Panama Road and divert flood water around th Reynolds Tract area.

With this new work and the same size floods as in 1995 and 1998 when Caliente Creek flood water made a mess of Lamont, it is possible that the roads would still be flooded, but Lamont might get by with little or no damage.

In all past floods, a good share of the water has flowed through openings in the Tamarisk levee-dam and made its way into natural channel south of Arvin. What is different now is that all of the openings in the levee have been blocked with dirt and concrete blocks right up to th top.

That means that all of the flood water from Caliente Creek will be turned to the west and flow through artificial channels or on the count roads right into Lamont. The new plugs were put in after the 1998 flood.

Why doesn't someone do something about this? The county has spent millions on Lamont flooding but seems to ignore that the levee-dau creates an unnatural condition. The Tamarisk levee-dam did not exist when the largest known flood happened in 1932. After that, the leve was put up and trees were planted on it. Now, it is two and a half miles long, 20 feet high in some places, and reinforced with concret blocks, and old car bodies. A solid barrier.

Does the county know about it? Well, it has certainly been told about it many times. It seems to believe it is absolved of any responsibilit for damage the levee might cause as the results of several recent lawsuits.

It is willing to include remedial actions in the list of projects that make up a long-range Kern Lake Basin Flood Management Plan that wa adopted earlier this year. However, those actions depend on massive financing and might take 20 or 40 years before any actual floo channels and floodwater disposal areas come into being.

In the meantime, Lamont sits there with the full potential for all the flood water from Caliente Creek smashing into it. Is it possible the Lamont, once a depression-era haven for refugees from the Dust Bowl and now a center for a large Hispanic population, is suffering from the stigma of second class citizenship?

Why and where else would this potentially dangerous situation be allowed to persist?

Stuart Pyle, engineering consultant to the Lamont Storm Water District and former general manager of the Ker County Water Agency.

Top Video Headlines





Tuesday, Dec 21 2010 07:22 PM

Lamont canal survives storm

BY GRETCHEN WENNER, Californian staff writer gwenner@bakersfield.com

LAMONT -- Lamont residents were again spared major flooding Tuesday as officials continued efforts to keep a canal from breaking.

Their worst fears -- that the Eastside Canal wouldn't be able to hold all of the floodwater pouring into it -- were kept in check as rainfa eased overnight. But work shoring up the canal's weak spots was still needed.

The canal broke in numerous places in 1983, contributing to an epic flood. Lamont, a community about 15 miles southeast of Bakersfield was flooded again in 1995 and 1998, though the canal held those years.

Mark Mulkay, general manager of the Kern Delta Water Storage District, which owns the canal, was busy putting out fires Tuesday.

He'd been working all day to fix a section above Bear Mountain Boulevard, perhaps 100 feet long, that had broken around 10:30 p.n Monday, unleashing water over farmland and near some homes.

On Tuesday, a small leak where the canal crossed Di Giorgio Road had sent water flowing toward houses in central Lamont, panickin residents. Such little overpours aren't necessarily a bad thing.

"It spreads out the hurt," he said.

But county firefighters had patched the leak, which caused more headaches: A worker downstream had been on a tractor in the canal. Th sudden rise in water levels endangered him and left the tractor submerged.

"The problem is, it dead ends," Mulkay said of the canal.

That means Mulkay has to find places for excess water to go as floodwater enters the canal. So far, farmers have agreed to take water the don't need to help prevent catastrophe.

"This is not a flood control structure," Mulkay said. "It's an irrigation canal."

Other canals owned by the district have also served as an outlet to ease flooding in Bakersfield and elsewhere, he said.

The Eastside Canal runs more than 18 miles from the Kern River, near Manor Street, to a spot below Bear Mountain Boulevard, west (Arvin.

While a break from rain meant the worst problems were under control Tuesday, Kern County officials went ahead with a plan to pum water from the canal into a new storm drain system on Panama Road.

Workers from water-handling company Rain for Rent were installing three large pumps Tuesday afternoon, each capable of handling 4 cubic feet per second.

"They are big pumps," said Chuck Lackey, head of the county's engineering department.

Lackey hopes the pumps, which were ordered Monday night, will take pressure off the canal. The pumping may no longer be needed for th current storm, but Lackey wants the system tested anyway.

"If there is a flood in the future, it will be another tool we can use," he said.

The county's new storm drain system, which was built around 2004 and routes water west of town through a series of basins and drainfield, was given its first big test by the weekend downpours.

"It's extremely successful," Lackey said of the structure.

A breach of the canal north of town, by Kam Avenue, allowed floodwaters to pour into the canal. The county had also designed a floo control system there, but the sheer volume of Caliente Creek floodwater exceeded the system's capacity, Lackey said.

Some residents narrowly escaped flooding that swamped some streets.

Ruby Garcia's family piled sandbags to keep water out of their home on Mountain View Road on Monday, as did neighbors. Water cam over the driveway, almost to the front door, but stopped just feet from the house.

"It's pretty scary when you see water coming up right here," Garcia said Tuesday.

Residents in Arvin, Lamont threatened by creek flooding

By Amity Addrisi, Eyewitness News Published: Dec 20, 2010 at 7:28 PM PDT Last Updated: Dec 20, 2010 at 7:28 PM PDT



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ARVIN, Calif. -- As the rainfall continued, storm water basins in Lamont were getting dangerously full, threatening to flood homes nearby.

Juan Esquivel lives near the Caliente Creek storm flood water basin where the levees are close to capacity. Esquivel said, "My concern is that water is going to go in the houses, because we're so close to the canals, we're already in a flood zone risk."

Through the storm, Esquivel is holding his breath, hoping his home doesn't end up under water and plans to use sandbags to protect his home. The threat of water flooding over the levees in Lamont is a big concern and caused the evacuation of a the Lamont Children's Development Center on Monday afternoon.

Caliente Creek is causing more problems up stream near Arvin. There, the raging water is washing away the land near one home off Comanche Road. Hugo Figueroa lives there and says the fire department told him and his family to evacuate.

The Caliente Creek flood channel at Comanche Road was built in the 1990s to protect from flooding, but, with the record rainfall, dirt and debris has clogged the system, causing the base of the bridge to erode.

Because of the damage to the bridge, Comanche Road at Caliente Creek is closed indefinitely. Getting around that closure is almost impossible. Flooding has washed out

several roads between Lamont and Arvin, including Malaga and Vineland roads.

Back in Lamont home owners like Esquivel say they can only watch and wait.

"I am gonna stay awake and see what's going on, because I have a friend up in the lake, he told me it's raining a lot and all that rain is coming down here and here it doesn't stop raining either," Esquivel said.

The Kern County Roads Department and the Kern County Fire Department are working to try to divert the flooding away from homes.