



PUBLIC NOTICE

**U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT**

BUILDING STRONG®

**APPLICATION FOR PERMIT
CEMEX Lytle Creek Levee Repair**

Public Notice/Application No.: SPL-2006-01460-AJS

Project: Lytle Creek Levee Repair

Comment Period: October 28 through November 30, 2015

Project Manager: Antal Szijj; 805-585-2147; Antal.J.Szijj@usace.army.mil

Applicant

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Location

At the CEMEX Lytle Creek Quarry in and adjacent to Lytle Creek, near the city of Rialto, San Bernardino County, CA (Lat: 34.1713N, Long: 117.4036W). See Figure 1, Regional Vicinity Map.

Activity

To repair and improve the structural integrity of a storm-damaged levee capable of withstanding a projected 100-year flood and allowing the resumption of aggregate mining within the "South Pit" at the CEMEX Lytle Creek Quarry (Quarry), as depicted on the attached drawings. Work would include reconstructing an approximately 1,000 foot section of levee that was breached by high flows in 2005 with an armored levee capable of withstanding the projected 100-year flood, and repairing an eroded section of the remaining intact levee with approximately 700 linear feet of additional armoring. The proposed work would result in approximately 2.6 acres of permanent impacts to waters of the U.S. and an additional 2.7 acres of temporary impacts. For more information see page 3 of this notice.

Interested parties are hereby notified an application has been received for a Department of the Army permit for the activity described herein and shown on the attached drawing(s). We invite you to review today's public notice and provide views on the proposed work. By providing substantive, site-specific comments to the Corps Regulatory Division, you provide information that supports the Corps' decision-making process. All comments received during the comment period become part of the record and will be considered in the decision. This permit will be issued, issued with special conditions, or denied under Section 404 of the Clean Water Act.

Comments should be mailed to:

LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS
REGULATORY DIVISION
ATTN: Antal Szijj
Ventura Field Office
2151 Alessandro Drive, Suite 110
Ventura, CA 93001

Alternatively, comments can be sent electronically to: Antal.J.Szijj@usace.army.mil

The mission of the U.S. Army Corps of Engineers Regulatory Program is to protect the Nation's aquatic resources, while allowing reasonable development through fair, flexible and balanced permit decisions. The Corps evaluates permit applications for essentially all construction activities that occur in the Nation's waters, including wetlands. The Regulatory Program in the Los Angeles District is executed to protect aquatic resources by developing and implementing short- and long-term initiatives to improve regulatory products, processes, program transparency, and customer feedback considering current staffing levels and historical funding trends.

Corps permits are necessary for any work, including construction and dredging, in the Nation's navigable water and their tributary waters. The Corps balances the reasonably foreseeable benefits and detriments of proposed projects, and makes permit decisions that recognize the essential values of the Nation's aquatic ecosystems to the general public, as well as the property rights of private citizens who want to use their land. The Corps strives to make its permit decisions in a timely manner that minimizes impacts to the regulated public.

During the permit process, the Corps considers the views of other Federal, state and local agencies, interest groups, and the general public. The results of this careful public interest review are fair and equitable decisions that allow reasonable use of private property, infrastructure development, and growth of the economy, while offsetting the authorized impacts to the waters of the United States. The permit review process serves to first avoid and then minimize adverse effects of projects on aquatic resources to the maximum practicable extent. Any remaining unavoidable adverse impacts to the aquatic environment are offset by compensatory mitigation requirements, which may include restoration, enhancement, establishment, and/or preservation of aquatic ecosystem system functions and services.

Evaluation Factors

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof. Factors that will be considered include conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people. In addition, if the proposal would discharge dredged or fill material, the evaluation of the activity will include application of the EPA Guidelines (40 CFR Part 230) as required by Section 404 (b)(1) of the Clean Water Act.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Preliminary Review of Selected Factors

EIS Determination- A preliminary determination has been made an environmental impact statement is not required for the proposed work.

Water Quality- The applicant is required to obtain water quality certification, under Section 401 of the Clean Water Act, from the California Regional Water Quality Control Board. Section 401 requires any applicant for an individual Section 404 permit provide proof of water quality certification to the Corps of Engineers prior to permit issuance.

Coastal Zone Management- This project is located outside the coastal zone and preliminary review indicates it would not affect coastal zone resources. After a review of the comments received on this public notice and in consultation with the California Coastal Commission, the Corps will make a final determination of whether this project affects coastal zone resources after review of the comments received on this Public Notice.

Essential Fish Habitat- No Essential Fish Habitat (EFH), as defined by the Magnuson-Stevens Fishery Conservation and Management Act, occurs within the project area and no EFH is affected by the proposed project.

Cultural Resources- The latest version of the National Register of Historic Places has been consulted and this site is not listed. This review constitutes the extent of cultural resources investigations by the District Engineer, and he is otherwise unaware of the presence of such resources. The Corps' area of potential effect (APE) for the subject action consists of the footprint of the proposed levee (including repair of the eroded portion of the remaining intact levee), plus adjacent temporary construction areas and construction access routes through the south pit as depicted on Exhibit 3 (Jurisdictional Map). All areas within the APE comprise either the active channel of Lytle Creek or areas previously disturbed by mining activity. Therefore there is little likelihood of any effects to previously unknown cultural resources associated with the issuance of a Corps permit.

Endangered Species- The Corps has determined that the proposed action may adversely affect two federally listed endangered species, the San Bernardino Merriam's kangaroo rat (*Dipodomys merriami parvus*, SBKR) and Santa Ana River woolly star (*Eriastrum densifolium sanctorum*), as well as designated critical habitat for kangaroo rat. Recent trapping studies have found SBKR in the vicinity of the proposed levee reconstruction and also in the area of the proposed erosion repair. SBKR generally favors pioneer and intermediate stage Riversidean alluvial fan sage scrub (RAFSS) habitat with appropriate sandy substrate for burrowing. Additionally, four individual Santa Ana River woolly-star plant were identified in the footprint of the proposed levee reconstruction during a 2014 survey.

The Corps previously initiated consultation with the U.S. Fish & Wildlife Service for an earlier version of the proposed levee which was ongoing at the time the applicant amended the project to the currently proposed design. The Corps will be re-initiating formal consultation with the U.S. Fish & Wildlife Service to address the proposed project's direct, indirect and cumulative effects to federally listed species and critical habitat.

Public Hearing- Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearing shall state with particularity the reasons for holding a public hearing.

Proposed Activity for Which a Permit is Required

Basic Project Purpose- The basic project purpose comprises the fundamental, essential, or irreducible purpose of the proposed project, and is used by the Corps to determine whether the applicant's project is water dependent (i.e., requires access or proximity to or siting within the special aquatic site to fulfill its basic purpose). Establishment of the basic project purpose is necessary only when the proposed activity would discharge dredged or fill material into a special aquatic site (e.g., wetlands, pool and riffle complex, mudflats, coral reefs). Because no fills are proposed within special aquatic sites, identification of the basic project purpose is not necessary.

Overall Project Purpose- The overall project purpose serves as the basis for the Corps' 404(b)(1) alternatives analysis and is determined by further defining the basic project purpose in a manner that more specifically describes the applicant's goals for the project, and which allows a reasonable range of alternatives to be analyzed. The overall project purpose for the proposed project is to reconstruct an earthen levee that was breached by flooding in 2004-2005 to enable resumption of aggregate mining in the South Pit in a manner that will eliminate or reduce upstream headcutting.

Additional Project Information

Baseline information

Site history:

Flows within this reach of Lytle Creek have historically split around a large terrace island immediately upstream of the project area. The levee surrounding the South Pit was constructed by a previous mining operation around 1976 to divert flows towards the northerly side of the wash and facilitate the establishment of South Pit. Mining operations were eventually expanded to a terrace deposit on the opposite (north) side of Lytle Creek with flows channeled between the two pits. An armored embankment was constructed in 2000 using soil cement along the north side of the channel to protect the North Pit from intrusion by floodwaters.

During high flows within Lytle Creek in 2004-2005 the levee surrounding the South Pit of the Quarry was breached and the bulk of the river's flow, now contained in the braid flowing on the south side of the terrace island, was diverted into the pit. CEMEX applied for and obtained a Corps' permit verification under the Nationwide Permit Program to reconstruct the levee in 2007. The proposed project was reverified in 2011; however, levee repairs were not completed and the permit verification and grandfathering provisions expired in 2013. CEMEX reapplied to construct a modified version of the previous design, consisting of an earthen and rock levee in the same location, but with armoring only providing 25-year flood protection. The Corps determined that the proposed project was no

longer eligible for authorization under the Nationwide Permit Program and a Standard Individual Permit would be required.

Site Conditions and Biological Resources:

The CEMEX Lytle Creek Quarry is bisected by the active channel of Lytle Creek, with upland terraces that were historically part of a broad alluvial floodplain. Lytle Creek drains a watershed of approximately 46.6 square miles, originating in the San Gabriel Mountains. Lytle Creek is an intermittently flowing tributary to traditional navigable water exhibiting bed and banks, and an ordinary high water mark. The pit area is considered an excluded feature (i.e. not a water of the U.S.). The delineation of waters of the U.S. identified a total of approximately 140 acres of non-wetland waters within the survey area (see Figure 2, Jurisdictional Map).

The project footprint and surrounding undeveloped portions of Lytle Creek support a mixture of active wash and RAFSS habitat in various successional stages (pioneer, intermediate and mature) as well as disturbed habitats resulting from historic and ongoing mining activities. A biological assessment prepared on behalf of the applicant identified approximately 115 acres of active wash, 204 acres of RAFSS and 84 acres of mining operations/disturbed areas within the survey area (see Figure 3, Vegetation Map). Since the breach in 2005, flows are no longer concentrated in the channel between the North and South Pits, resulting in a gradual development of pioneer-stage RAFSS habitat and sandier substrate which appear to be more favorable to occupation by SBKR.

The south braid of the channel has exhibited headcutting (i.e. downward incision of the channel bed) as the channel gradually reestablishes an equilibrium condition between the deeper excavated pit and south braid over successive flood events. Based on a hydrology study prepared on behalf of CEMEX for the proposed action, the headcut within the south braid has largely stabilized. Flows within Lytle Creek continue to split around the upstream terrace island, with the majority of flows conveyed along the south braid and through the pit, and a smaller proportion along the north braid and between the two pits where all flows were conveyed prior to the breach. Flows that currently enter the pit are conveyed through a culvert under CEMEX's haul road connecting the North Pit to their processing facility and continue downstream, eventually rejoining the channel passing between the pits and continuing to the confluence with Cajon Creek approximately one mile downstream.

Related Actions:

The Corps is also concurrently reviewing an application from the adjacent property owner, Lytle Development Company (LDC), to construct the Lytle Creek Ranch South Residential and Commercial Development (Corps file SPL-2013-183-CLH). The LDC Project is bisected by the CEMEX Quarry and encompasses approximately 2,400 acres along the southerly side of Lytle Creek Wash, extending from approximately 1 mile upstream of the I-15 Freeway, downstream to the confluence with Cajon Creek. The LDC Project (applicant's preferred alternative) would include a levee along the entire length that would tie into the CEMEX levee to form one contiguous levee providing 100-year flood protection. The Corps has determined the Proposed CEMEX levee has independent utility from the LDC Project (i.e. it is not dependent on the completion of the LDC Project levee to achieve the overall project purpose).

Project description

The proposed project involves reconstruction of a flood-damaged levee, as well as repairs to an eroded section of the remaining levee as depicted on Figure 4, Lytle Creek South Levee Conceptual

Repair Plan. The reconstructed levee would be located in roughly the same location and alignment that existed prior to the breach and tie into the existing levee sections at each end. The reconstructed levee would be wider at the base compared with the pre-breach condition and feature armoring on the river side comprised of 2-ton grouted rock or soil-cement at a 1.5:1 slope, and an earthen face on the pit side at a 4:1 slope. The proposed armoring would extend around the end of the remaining intact levee for a total distance of approximately 1,600 linear feet. Additional repairs to an eroded portion of the remaining intact levee section would also be constructed comprising 700 linear feet of grouted rock or soil cement at a 2:1 slope. Due to the elevation difference between the pit and the north braid of Lytle Creek there is a concern that continued erosion in this section of the remaining levee could cause a second breach and corresponding headcut in the north braid. This could in turn undermine the levee on the north side of Lytle Creek which protects the North Pit and existing residential development further upstream. Failure of the levee on the north side of the channel could cause flows to enter the deeper North Pit, which would propagate a more severe headcut extending deeper and further upstream. The proposed repairs to the eroded section are intended to protect against this scenario.

The levee reconstruction and repair would require approximately 513,000 cubic yards of earthen fill material obtained from within the South Pit. Depending on the armoring chosen, an additional 21,300 cubic yards of soil-cement or 18,200 cubic yards of grouted rock would also be required to protect the levee from flood-related scour.

The Total footprint of permanent impacts within water of the U.S. would be 2.6 acres, with an additional 2.7 acres of temporary construction impacts. Figure 2 depicts impact areas relative to waters of the United States. Following construction the headcut within the southerly channel would gradually fill in as flows and sediment are impounded behind the reconstructed levee. Once flows reach the bed elevation of the adjacent channel flowing between the pits they would be conveyed between the pits. Over time the channel bed elevation of the south braid would aggrade to match the elevation of the main channel and bury the lower third of the reconstructed levee. The length of time required for the south braid to aggrade to its pre-breach elevation would depend on the frequency and intensity of flood events that would mobilize and deliver channel substrate to the affected reach.

CEMEX has indicated they intend to resume mining activities within the South Pit if and when the levee is completed.

Project Alternatives

As part of the Corps' permit evaluation process, alternatives to the proposed project would be considered pursuant to the 404(b)(1) guidelines. The guidelines require the Corps to authorize the "least environmentally damaging practicable alternative" that meets the overall project purpose. The applicant has provided the following conceptual alternatives and discussion as part of their application. This does not represent a complete list of alternatives that may be considered by the Corps, or a determination of their adequacy. They are provided here for informational purposes and to solicit comments.

1. No Action Alternative.

Under the No Action Alternative, no work within waters of the U.S. would take place. Therefore no protective measures would be constructed around the South Pit that was previously protected by the 1976 Levee. It is unlikely CEMEX would be able to resume mining operations in the South Pit under the No Action Alternative, unless a feasible means to mine material in a phased manner during periods of little or no flow. Additionally, the upstream headcut would remain, as well as the potential threat of a second breach from the north braid.

2. Modified Location Alternative.

Under the Modified Location Alternative the reconstructed levee and a portion of the remaining intact levee would be relocated from its proposed location (roughly in line with the 1976 levee) to one further inside the pit area. The relocated levee would tie into the existing levee a few hundred feet further back from the proposed connection point thereby providing a wider channel area between the levee and the terrace island. This terrace has been identified as an important refuge for SBKR. The wider channel area would result in lower flood velocities, which in turn would reduce the potential erosion of this feature. This alternative would also reduce the overall area of impact to waters of the U.S.; however a greater volume of fill material would be required since more of the levee re-construction would be located within excavated portions of the South Mining Pit. This alternative would also reduce the geographic area available to CEMEX for mining purposes by moving the northern portion of the re-constructed levee into areas that had been mined in the past.

3. Armored Low-Level Levee Alternative.

Under this alternative, an armored low-level levee would be constructed, which would allow water to move through the South Mining Pit during high flow periods, in a manner that would minimize the potential for head-cutting in Lytle Creek upstream of the levee and South Mining Pit. Such a structure could allow mining during low or no flow periods in the South Mining Pit, but does not mitigate the full range of flood risk management impacts that the proposed levee is intended to address. Thus, this alternative may not be acceptable to the County.

4. Reduced Flood Protection Alternative.

Under this alternative a levee would be constructed that provides less protection than the proposed project (100-year storm event) or otherwise provides only partial protection of the South Mining Pit. Similar to the Armored Low-Level Levee alternative, water would move through the South Mining Pit during high flow periods, in a manner that would minimize the potential for head-cutting in Lytle Creek upstream of the levee and South Mining Pit. Such a structure could allow mining during low or no flow periods in the South Mining Pit, but does not mitigate the full range of flood risk management impacts that the proposed levee is intended to address. Thus, this alternative may not be acceptable to the County. In addition, this alternative may not meet the overall project purpose.

Proposed Mitigation–

The proposed compensatory mitigation may change as a result of comments received in response to this public notice, the applicant's response to those comments, and/or the need for the project to comply with the 404(b)(1) Guidelines. The applicant has provided a conceptual plan to compensate for permanent impacts to 2.6 acres of waters of the U.S. through enhancement of 2.8 acres of RAFSS habitat within CEMEX property along Lytle Creek. The enhancement would involve vegetation management and long-term preservation over a portion of the terrace island within CEMEX's property to improve habitat conditions for SBKR. Figure 5 depicts the proposed enhancement location.

Proposed Special Conditions

Special conditions addressing avoidance, minimization and compensation of impacts to waters of the U.S. as well as federally listed endangered species and critical habitat would likely be included in the final permit, if issued. No special conditions are proposed at this time.

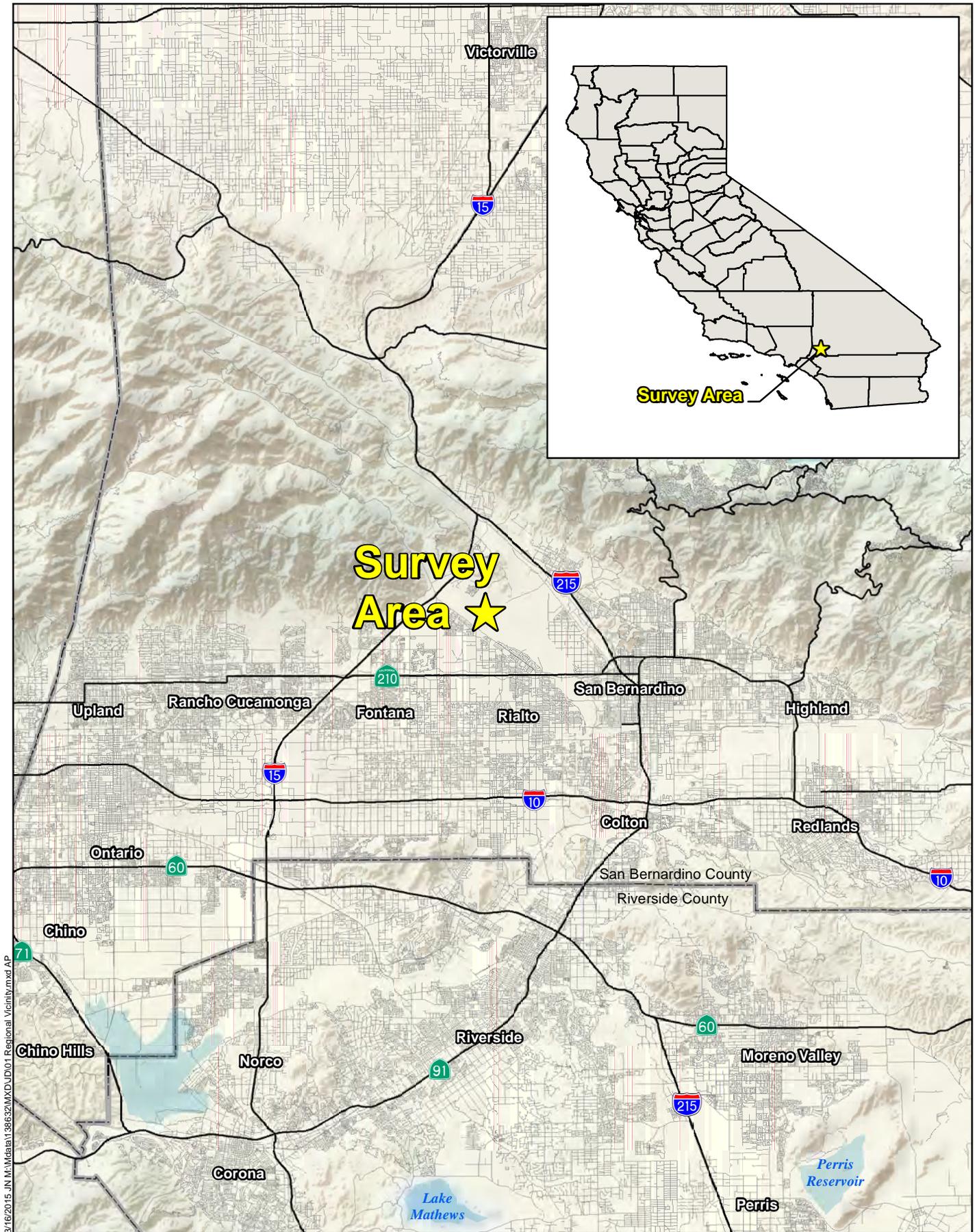
For additional information please call Antal Szijj of my staff at 805-585-2147 or via e-mail at Antal.J.Szijj@usace.army.mil. This public notice is issued by the Chief, Regulatory Division.



Regulatory Program Goals:

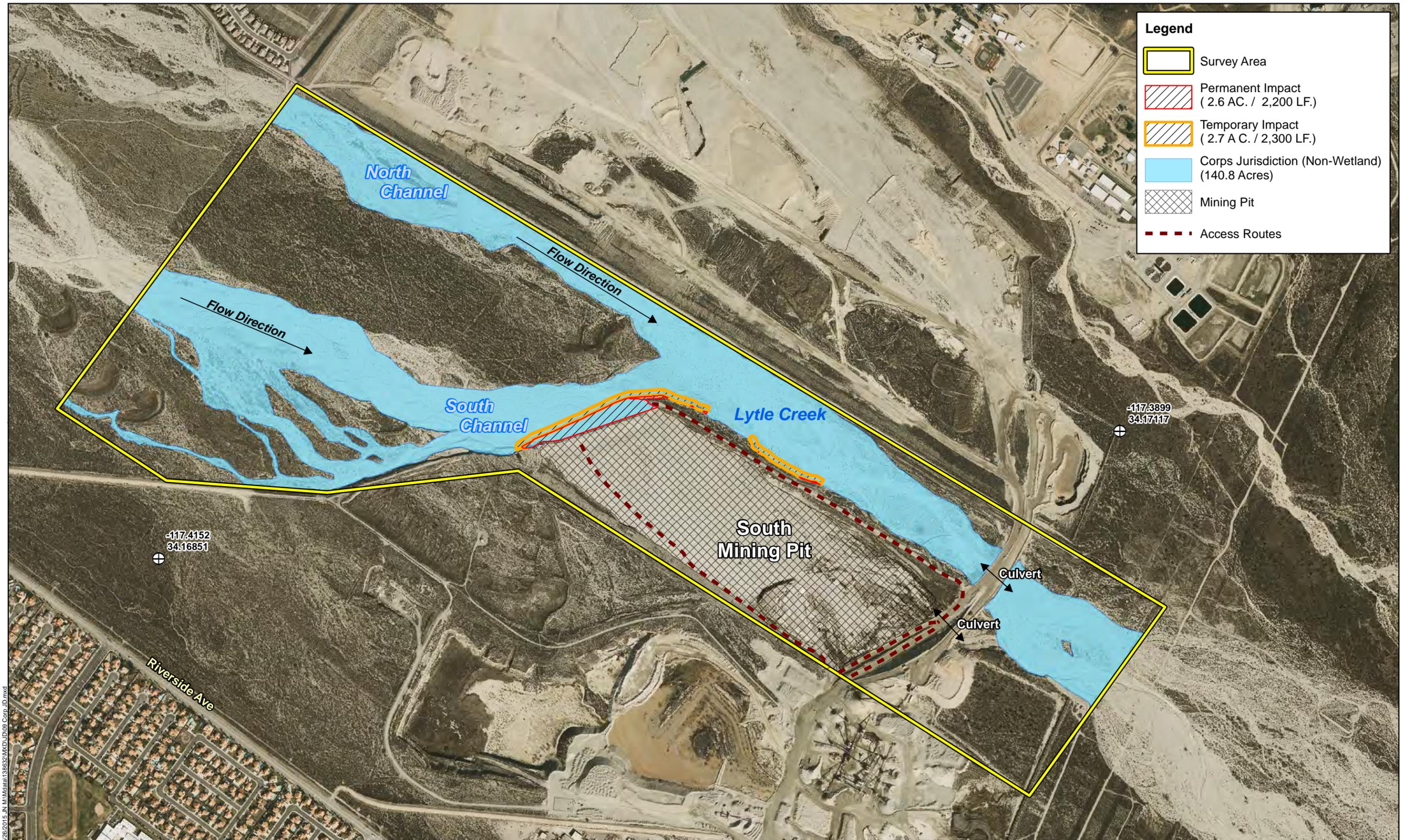
- To provide strong protection of the nation's aquatic environment, including wetlands.
- To ensure the Corps provides the regulated public with fair and reasonable decisions.
- To enhance the efficiency of the Corps' administration of its regulatory program.

DEPARTMENT OF THE ARMY
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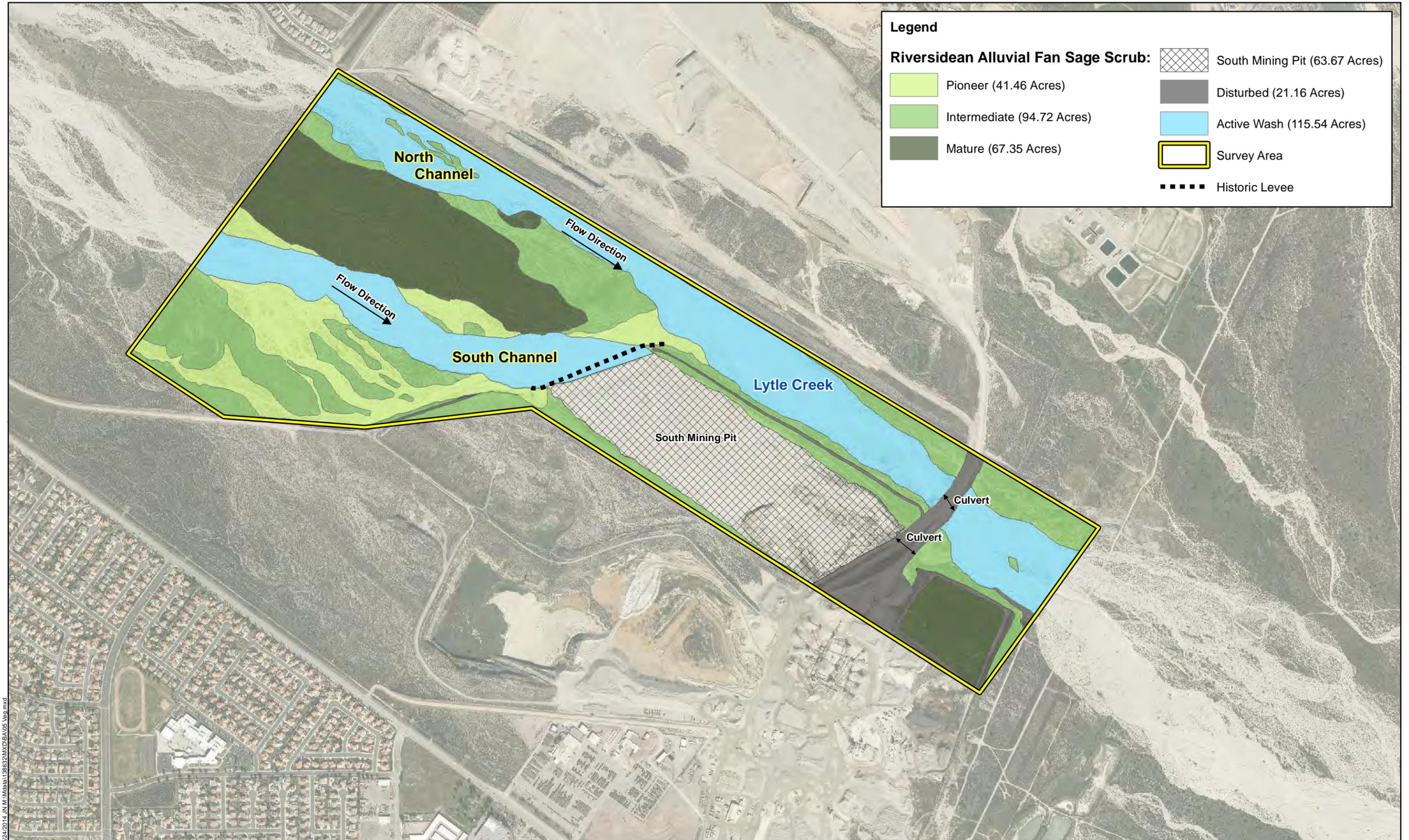
LYTLE CREEK SOUTH LEVEE REPAIR PROJECT
 DELINEATION OF FEDERAL JURISDICTIONAL WATERS
Regional Vicinity Map



Legend

- Survey Area
- Permanent Impact (2.6 AC. / 2,200 LF.)
- Temporary Impact (2.7 A.C. / 2,300 LF.)
- Corps Jurisdiction (Non-Wetland) (140.8 Acres)
- Mining Pit
- Access Routes

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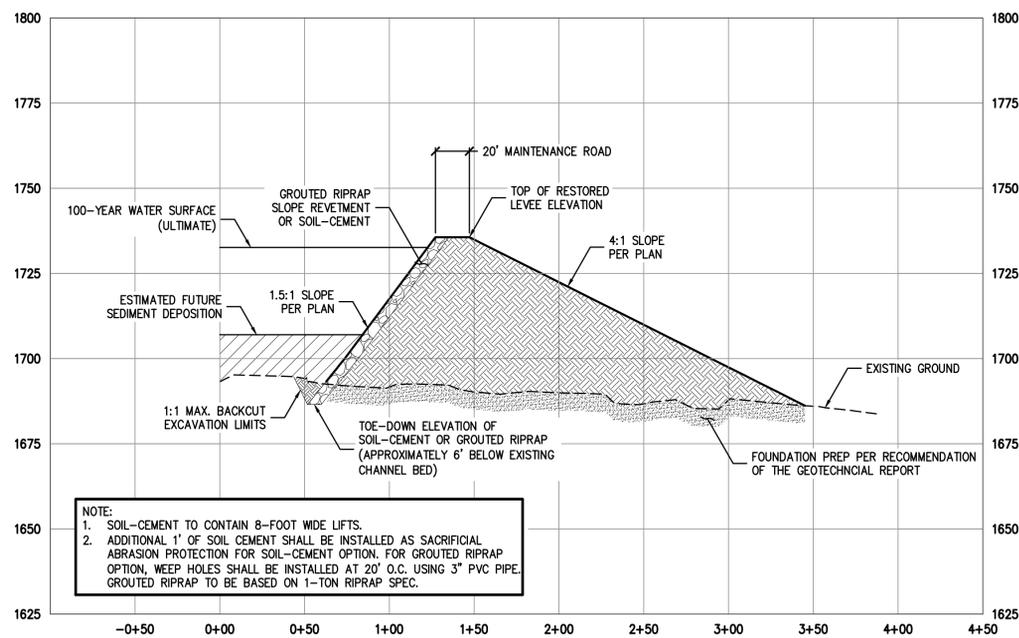
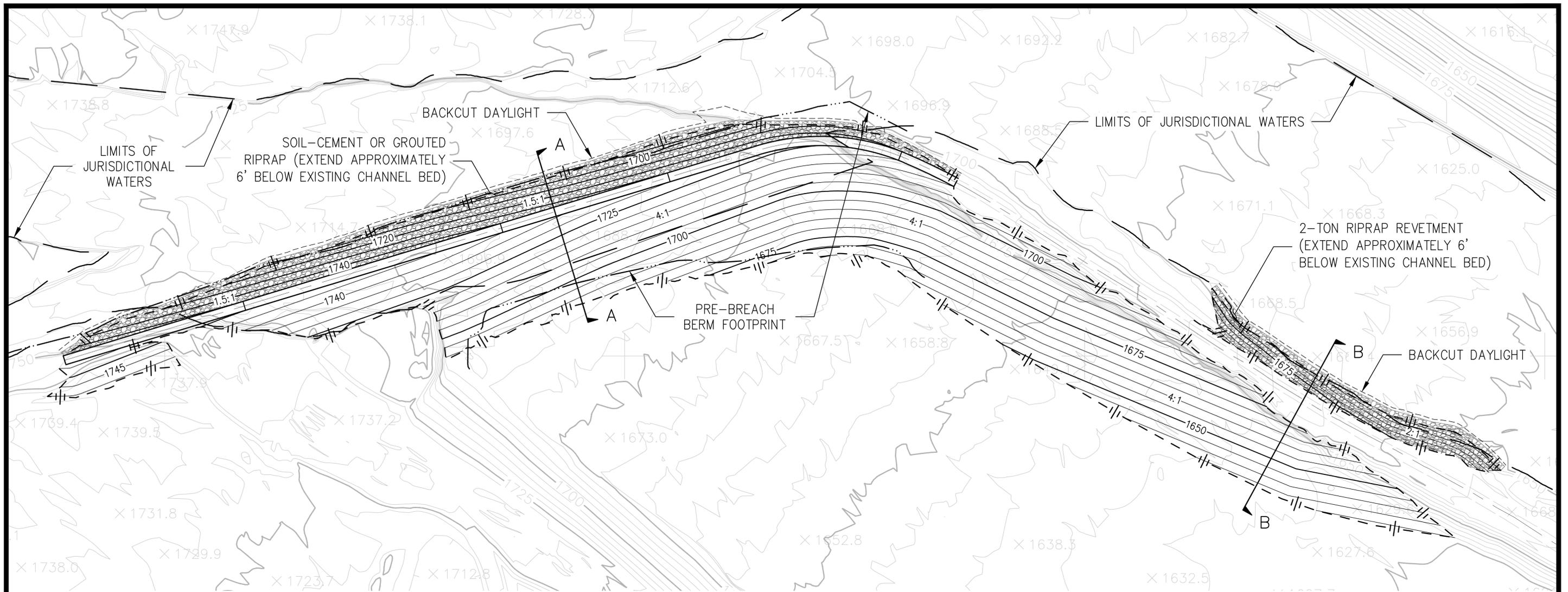
Riversidean Alluvial Fan Sage Scrub:

	Pioneer (41.46 Acres)		South Mining Pit (63.67 Acres)
	Intermediate (94.72 Acres)		Disturbed (21.16 Acres)
	Mature (67.35 Acres)		Active Wash (115.54 Acres)
			Survey Area
			Historic Levee

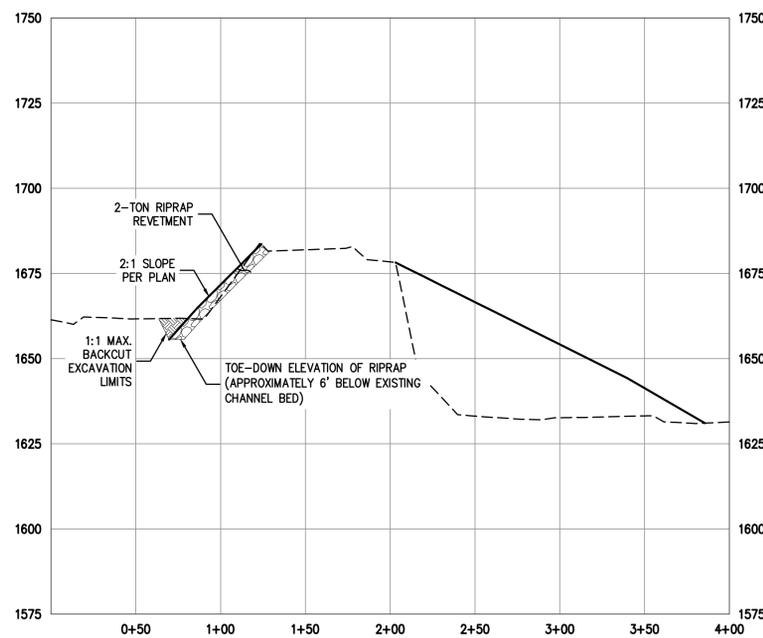
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Source: Eagle Aerial 2013



SECTION A-A
SCALE HORIZ: 1"=50' VERT. 1"=25'



SECTION B-B
SCALE HORIZ: 1"=50' VERT. 1"=25'

LEGEND:

- EXISTING CONTOURS
- PROPOSED GRADING
- ▨ GROUTED RIPRAP SLOPE REVETMENT OR SOIL-CEMENT
- JURISDICTIONAL WATERS
- PRE-BREACH BERM FOOTPRINT

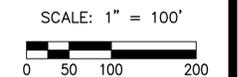
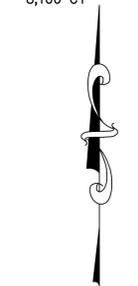
NOTES:

THE 1-FOOT CONTOUR INTERVAL BASE TOPOGRAPHIC MAPPING WAS OBTAINED FROM THE COUNTY OF SAN BERNARDINO FLOOD CONTROL DISTRICT AND IS ON NAVD 88 DATUM. THE JURISDICTIONAL WATERS WERE PROVIDED BY RBF CONSULTING. THE PRE-BREACH BERM FOOTPRINT WAS ESTIMATED FROM 2004 TOPOGRAPHIC MAPPING.

RIPRAP GRADATION, THICKNESS, AND FILTER FABRIC TO BE PER CALTRANS OR OTHER COUNTY OF SAN BERNARDINO APPROVED STANDARD.

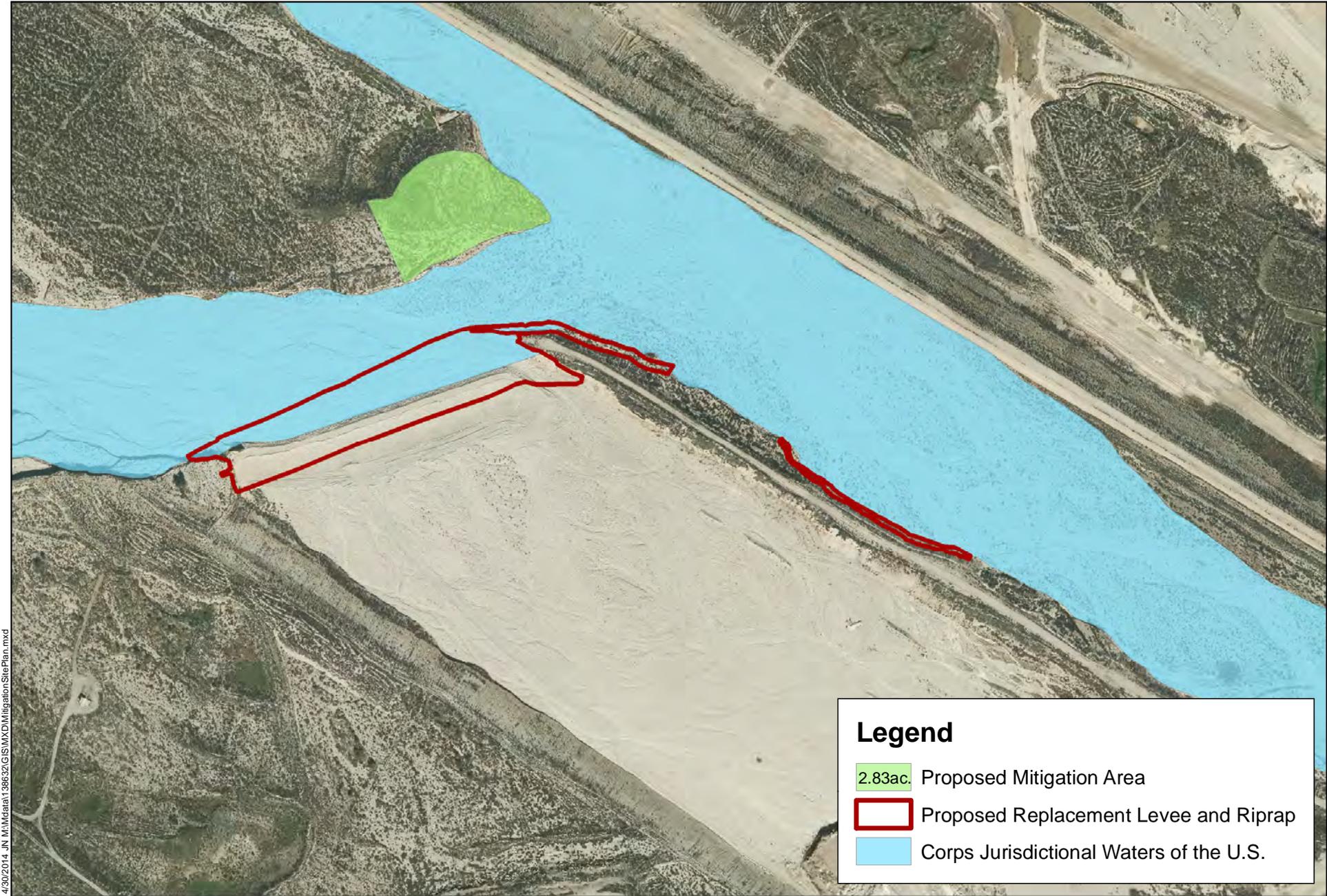
QUANTITIES:

PROPOSED BERM FOOTPRINT	16.00 ACRES
EXISTING BERM WORK AREA FOOTPRINT	0.23 ACRES
FILL MATERIAL IN PROPOSED BERM (FILL MATERIAL WILL BE OBTAINED FROM ADJACENT SOUTH PIT)	513,000 CY
SOIL-CEMENT OPTION	21,300 CY
GROUTED RIPRAP OPTION	18,200 CY
2-TON RIPRAP ON PROPOSED BERM	8,100 CY



CEMEX LYTLE CREEK QUARRY
LYTLE CREEK SOUTH LEVEE CONCEPTUAL REPAIR PLAN v.3

Figure 4



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Legend

- 2.83ac. Proposed Mitigation Area
- Proposed Replacement Levee and Riprap
- Corps Jurisdictional Waters of the U.S.



Source: Eagle Aerial Imaging -- 2013, ArcGIS Online

LYTLE CREEK SOUTH LEVEE REPAIR
MITIGATION SITE PLAN

Figure 5