

Public Works, Flood Control and Water Conservation District

Mitigated Negative Declaration Addendum 15NGD-00000-0000 Addendum 3

Las Vegas – San Pedro Creeks
Capacity Improvements Project
San Pedro Creek Floodwall



1.0 REQUEST/PROJECT DESCRIPTION

The Santa Barbara County Flood Control District (CFCD), in partnership with Caltrans and Union Pacific Railroad (UPRR), is commencing hydraulic capacity improvements along Las Vegas and San Pedro Creeks under Calle Real, U.S. US 101 and UPRR as part of the Las Vegas/San Pedro Creeks Capacity Improvement Project (Project). The Project would increase the hydraulic capacity of the two creeks from a 10-year runoff event to a 25-year runoff event in the vicinity of Calle Real and U.S. US 101., Additional benefits of the project include removal of barriers to steelhead migration along San Pedro Creek.

Under existing conditions, Las Vegas Creek has the hydraulic capacity to carry peak flows of less than a tenyear event, while San Pedro Creek under Calle Real, US 101 and the UPRR has the hydraulic capacity to carry peak flows of no greater than a ten-year event. As a result, the existing hydraulic capacities of the Las Vegas and San Pedro Creeks under Caller Real, US 101 and UPRR result in overtopping of the roadway surface at Calle Real and US 101 during heavy rains. In 1995, 1998 and 2000 flooding of Calle Real and US 101 occurred. These flooding events resulted in floodwaters backing up in San Pedro Creek into the neighborhood north of Calle Real with subsequent flooding and closures of both Calle Real and US 101.

The improved 25-year capacity allows water that would have exited the creeks upstream of US 101 to remain within the channel which raises the downstream water surface elevation thus requiring the floodwall to maintain the existing 100-year mapped floodplain. Updated topographic aerial survey data for the project area became available in 2012 and the hydraulic model was updated to reflect the refined landscape, and reevaluate the hydraulic performances of the two creeks to verify the need for the San Pedro Creek floodwall and berm as presented in the 2011 Project MND. Upon evaluation of the hydraulic model, it was determined that overtopping from the post-project 100-year storm event would occur in a slightly different configuration than was determined in in the 2011 MND.

The CFCD proposes a minor revision to previously approved hydraulic capacity improvements along San Pedro Creek, a component of the Las Vegas –San Pedro Creeks Capacity Improvements Project. The revised floodwall is in response to a refinement of hydraulic calculations for flows associated with approved Creek channel improvements (Figure 1; all figures are presented in Section 12.0 Attachments).

1.1 Background and Approved Project

The Las Vegas –San Pedro Creeks Capacity Improvements Project was originally reviewed under 11NGD-00000-00008 and was approved by the CFCD Board of Directors in 2011. The project addressed deficiencies in hydraulic capacity of Las Vegas and San Pedro Creeks that resulted in break-out flooding during 10-year storm events and overtopping of the roadway surface at Calle Real and US 101 during heavy rains. The approved project provided improvements for Las Vegas and San Pedro Creeks starting at Calle Real within the City of Goleta, US 101 within Caltrans right-of-way (ROW), the UPRR within the UPRR ROW, and the City of Santa Barbara Airport properties downstream of the UPRR. The project was separated into three components to facilitate implementation by CFCD and Caltrans. The three components are identified as:

- Project A: Improvements within Caltrans ROW and on San Pedro and Las Vegas Creeks extending to Calle Real within City of Goleta ROW, including: Las Vegas Creek replacing existing Las Vegas Creek culvert under US 101 with a bridge; replacing the Las Vegas Creek existing culvert under the southbound US 101/ Fairview Avenue off-ramp with a three-sided concrete box culvert; and replacing San Pedro Creek existing culvert under Calle Real and US 101 with a bridge.
- <u>Project B</u>: Improvements within UPRR ROW and Caltrans ROW, including: replacement of UPRR bridge over Las Vegas Creek, replacement of UPRR Bridge over San Pedro Creek, and channel conform work (i.e., the improvements that provide a transition between proposed and existing channel characteristics) between the proposed UPRR bridges and the proposed Caltrans bridges, and south of the UPRR within the City of Santa Barbara Airport property (Twin Lakes Golf Course); and

Project C: Improvements within the City of Santa Barbara Airport properties downstream of the UPRR, including: Las Vegas Creek conform work between the proposed wider UPRR bridge and downstream to the existing Las Vegas Creek within the Twin Lakes Golf Course; San Pedro Creek conform work between the proposed wider UPRR bridge and downstream to the existing San Pedro Creek; and installation of a berm and floodwall on the Santa Barbara Airport property located along the west side of the San Pedro Creek channel north of Hollister Avenue within Airport Long-Term Parking Lot #2.

To mitigate the increase in water surface elevation and inhibit inundation of adjacent properties resulting from the aforementioned capacity improvements, the CFCD proposed installation of a 620-foot floodwall along the west bank of San Pedro Creek commencing 350 feet downstream of the UPRR bridge and a 775-foot earthen berm (between the proposed floodwall and Hollister Avenue) to prevent right overbank for the 100-year and for the 25-year event floods, respectively (Figure 2). The floodwall and berm configurations are reflected in the 2011 MND.

Fish Passage

All proposed creek improvements were designed and approved to allow for fish passage and would have a natural bottom. The following components were approved to avoid or minimize adverse impacts to the Southern California Steelhead DPS during project construction:

- 1) Pre-construction surveys shall be conducted by the US Fish and Wildlife Service (USFWS) approved biologist within all suitable steelhead habitat on site immediately prior to construction to determine if steelhead are actively present in the work area.
- 2) Construction activity shall avoid actively flowing water, where feasible.
- 3) Any shallow or deep aquatic habitat including existing pools, riffles, and plunge pools shall be retained and/or restored within the impacts limits, where feasible.
- 4) Any construction activities and grading resulting in ground or vegetation disturbance occurring within the channel shall occur when water levels are low, where feasible.
- 5) If dewatering is anticipated, a pump shall be used to remove water to an upland disposal site or a filtering system shall be used to collect, filter, and return clear water back to the creek.
- 6) The disposal or storage of paint, solvents, stucco, fuel, cement, excess soil, mortar, and other toxicants within 100 feet of sensitive resources including San Pedro Creek shall be prohibited.
- 7) A qualified biological monitor shall be present on site while crews are working within the San Pedro Creek channel bed and banks to protect biological resources and enforce project conditions and compliance.
- 8) Where appropriate, silt fences, settling basins, and other sediment control devices shall be temporarily used during construction to control sedimentation and turbidity releases.
- 9) Heavy equipment shall use existing access ramps, roads, and/or disturbed land covers or areas where vegetation removal is proposed as part of the project to access work areas within San Pedro Creek.

1.2 Revised Proposed Project C

Because updated topographic aerial survey data for the project area became available in 2012, HDR Engineering Inc. (HDR) updated the HEC-RAS hydraulic model to reflect the refined landscape, and reevaluated the hydraulic performances of the two creeks to verify the need for the San Pedro Creek floodwall and berm as presented in the certified 2011 Project MND, 11NGD-00000-00008.

Upon evaluating the hydraulic model, HDR determined that overtopping from the post-project 100-year storm event would occur farther upstream and downstream than previously anticipated, commencing approximately 63 feet downstream of the UPRR bridge, running for a distance of approximately 837 feet (between bank Stations 10+00 and 18+37), ending approximately 200 feet downstream of the terminus of the existing concrete slope lining. Width of disturbance from the most northerly extent of the floodwall south and downstream for 637 feet extends approximately 35 feet from the toe of the east bank to the top of the west bank. Below this point and extending 200 feet south and downstream, the floodwall would be constructed 15-feet from the top of the west creek bank along an existing access road extending along the top of the bank; no disturbances within the creek channel would occur in this stretch.

The post-project hydraulic model indicated that there would be no increase in the 25-year water surface elevation, thus HDR concluded that the earthen berm could be eliminated from the project design.

Floodwall Design

Based on hydraulic evaluation and design recommendations by HDR, the FCFD has elected to pursue the design and construction of a concrete reinforced cantilevered floodwall (see Figure 3).

Consistent with FEMA freeboard requirements for floodwall certification as outlined in 44 CFR Section 65.10, the floodwall would vary in height between the Base Flood Elevation (100-year flood elevation) and the top of the floodwall by 3 to 4 feet (4 feet freeboard is required within 100 feet of a bridge). The floodwall would vary in height above the existing ground between 3 feet and 9.5 feet.

The cantilever floodwall would have an inverted T-wall shape with a stem, footing and shear keyway. The footing would be embedded a minimum of 2 feet below ground. In areas adjacent to existing buildings and other stationary structures, the floodwall would be built along the existing concrete slope lining, requiring portions of the lining to be removed and replaced. This would occur between Stations 18+38 to 12+00. At station 12+00, the floodwall angles to the southwest approximately 15-feet away from the top of San Pedro Creek for the remaining 200 feet of the design length. The flood wall is angled away from the top of the bank to avoid impacts to southern willow woodland growing along the west bank of the creek.

In addition to the floodwall, approximately 637 linear feet of riprap scour protection would be placed along the base of the concrete slope lining. Riprap is required along the concrete slope paving to protect the floodwall from scour in the event of a 100-year flow event. The depth of scour protection varies from 5 to 8 feet below the creek bottom and would be covered with native creek material. The width of rip rap would vary between 9- to 12-feet wide. Rip rap scour protection is not required along the most downstream 200 feet of the floodwall.

Impound Water Feature

A water feature designed to impound approximately 2 inches of water would be installed within Project B boundaries. This component was designed in response to agreements with the Regional Water Quality Control Board's permit requirements to provide instream vegetation for habitat and biofiltering (see Figure 4). A small semi-circular formation of 24- to 36-inch boulders, 50.5-feet in length, would be keyed into the channel bottom 4- to 6-feet deep and into the channel banks approximately 50 feet downstream of the new UPRR Bridge. The boulders would be stacked within the excavated area so that only a portion of the top layer of rocks would be exposed above the channel floor to create a 3.25-inch deep backwater area upstream of the formation. Voids between the rocks would be filled with native streambed material and a layer of clay sediment would underlay the upstream side of the rocks to facilitate water retention upstream of the rock feature. The rocks would not be anchored with any permanent material and would move with the channel bed so no down-cutting or fish barrier would develop. The backwater area channel bottom above the rock feature would be planted with a seed mix to propagate low-lying stream vegetation including: mugwort

(Artemesia douglasiana); yerba masna (Anemopsis californica); spikerush (Eleocharis macrostachys); Santa Barbara sedge (Carex barbarae); toad rush (Juncus bufonius); and California grey rush (Juncus patens). Construction Methodology

As mentioned above, the total maximum width of impact would be approximately 35 feet spanning San Pedro Creek from the westerly top-of-bank to the toe of the east bank. Although the entire width of the creek would not be graded for the entire project length, the width of the channel bottom would be impacted during construction since water diversion would likely be required, equipment access would impact the entire creek bed width, and a portion of the channel bottom would be excavated for rip rap placement along 637-feet of the floodwall. Construction equipment would gain access to the creek from the west bank off of Eckles Road, just past the downstream termination of the existing concrete slope lining.

The 200-foot section of floodwall would be installed outside of the creek adjacent to an existing access road that runs long the top of the west bank, and the remaining 637 feet of floodwall would need to be installed from within the creek because buildings and other permanent structures block landside access to the top of bank. The entire 637 feet of riprap scour protection would be installed from within the creek.

Construction efforts would likely last 60 working days, and would be executed as follows:

- 1. Mobilization: Contractor would mobilize equipment and materials to the job site and would either stage at the Eckles Road dead end or on adjacent field on City of Santa Barbara property.
- 2. Clear water diversion: the contractor would set up clear water diversion system (HDPE pipe, plastic sheeting, sand bags, pumps) to discharge creek flows downstream of the project limits.
- 3. Stormwater Pollution Prevention Program: erosion and sediment control Best Management Practices (BMPs) would be installed [at the least: silt fences surrounding work site, fiber rolls, stabilized construction entrance/exit, wind erosion control measures (tarping, dust control watering), preservation of ex. vegetation (fencing) if required. Non-stormwater BMP measures would also be instituted.
- 4. Remove approximately 430 feet of chicken wire and chain link fencing.
- 5. Clearing and grubbing: vegetation would be cleared and grubbed with chainsaws and hand tools along the top of the west bank.
- 6. Concrete slope lining removal: 700 square yards (SY) of slope lining would be removed with a sawcutter, dump trucks, excavator, front-end loader.
- 7. Additional, incidental surface concrete within the limits of excavation would be removed.
- 8. Excavation and demolition would be required for placement of the floodwall. Some excavated materials would be set aside for backfill. A total of 2,700 CY of removed concrete and excavated material would be disposed offsite. This work would include use of dump trucks, excavator and frontend loader equipment.
- 9. The two lakes on the Twin Lakes golf course would be filled in with 2,450 CY of excavated debris from the San Pedro Creek excavations. The lakes are currently provided water seasonally via a 4-inch gravity flow pipe from a permitted water diversion on San Pedro Creek (when it is flowing). Filling of the lakes would eliminate the need for the existing water diversion structure on the creek. The existing golf course lakes would be converted into swales serving as bunkers or hazard areas.

- 10. Temporary shoring would likely need to be installed along the existing industrial building near the UPRR Bridge to maintain the structural stability of the building during excavation activities. This activity would occur once excavation has begun.
- 11. Cantilevered floodwall installation: the floodwall would either be cast-in place or pre-fabricated offsite. The method would be specified as per the contractor's preference. If the floodwall is cast in place, crews would install and hand tie rebar. Forms would be placed and approximately 480 CY of concrete would be pumped in from the Hayward Lumber and City of Santa Barbara properties adjacent to the creek. Equipment would consist of concrete mixers, concrete vibrators and excavator attachment for hoisting and placing rebar.
- 12. Approximately 200 SF of fabric-formed concrete revetment would be placed on the east bank of San Pedro Creek at the upstream interface between the existing rock slope protection and proposed floodwall.
- 13. A 3-foot wide by 1.5-foot deep concrete swale would be placed along the back of the floodwall to divert surface water downstream, and approximately 25 CY of permeable backfill material would be placed around a perforated drain running the length of the floodwall footing.
- 14. Three existing outlet structures would be retrofitted with flap gates to prevent backflow per FEMA standards.
- 15. Structural backfill: the cantilevered floodwall would be backfilled with approximately 340 CY of structure backfill and 440 CY of lean concrete backfill. The lean concrete backfill would be pumped in from the Santa Barbara Properties.
- 16. 60 CY of concrete slope lining would be replaced. Concrete would be cast in place and reinforced with reinforcement matting or hand-tied rebar. The reinforcement would be doweled-into the existing concrete slope lining.
- 17. The bottom of the creek at the base of the concrete slope lining would be excavated and approximately 860 CY of rip rap would be placed in the excavated area atop rock slope protection fabric. This work would include use of 10-wheelers, excavator and frontend loader equipment. This work would be performed from within the creek.
- 18. Clean-up would include removal of the water diversion system and demobilization of equipment.

1.3 Construction Schedule and Traffic Control Measures

Construction is expected to occur between August - November 2015, in conformance with regulatory permit requirements.

1.4 Vegetation Removal and Restoration

Vegetation removal associated with both permanent and temporary impacts (i.e., staging areas) required to accommodate Project C improvements include the following mature vegetation (trees with trunk diameters of 6 inches and greater measured at 4 feet from the ground, or other mature vegetation such as shrubs):

- 1 coast live oak
- 1 eucalyptus tree

Riparian vegetation impacted with this project would be located within the creek bottom, along the creek access point off of Eckles Road, and within an approximately 3-foot swath of land along the top of the concrete slope paving. All vegetation would be cleared and grubbed and removed from the project site.

The portion of San Pedro Creek within the project area, within the creek bottom, is subject to routine CFCD maintenance activities as part of the approved County-wide Annual Routine Creeks Maintenance program. Mitigation for native vegetation removal within the creek bottom, that periodically occurs, has been previously mitigated at a 1:1 ratio for the area impacted. The Maintenance Program stipulates that once habitat mitigation has been achieved for a portion of a drainage, no further mitigation is required for future maintenance of that reach or site over the next ten years regardless of the type of maintenance activity, provided the previous habitat mitigation has been successfully implemented, and the CFCD continues to minimize habitat impacts to the extent feasible. The proposed creek bottom vegetation removal would therefore be recognized as part of the CDFC's on-going maintenance and mitigation program. The CFCD currently has 4,945 square feet of surplus restoration from replanting efforts along San Pedro Creek, so all anticipated impacts associated with native vegetation removal on San Pedro Creek for the current proposed project have been met separate from this project.

2.0 PROJECT LOCATION

The proposed Project C area is along San Pedro Creek, extending south from the UPPR Bridge crossing the drainage to approximately 825 feet north of Hollister Avenue. The Project C area is located within the City of Santa Barbara Airport jurisdiction. The project area is entirely within the Second Supervisorial District.

	Tab	ole 3. Site Information					
Comprehensive Plan	City of Santa	Barbara: Major Public and Institution					
Designation							
Zoning District, Ordinance	City of Santa Barbara: Municipal Code Chapter 29.23 C-R Commercial and						
	Recreational	Zone					
Site Size	Permanent D	isturbance Area: 0.55 acres;					
	Temporary D	Disturbance Area: 0.37 acres. Total Project Area: 0.92 acres					
Present Use & Development	San Pedro Cr	reek is maintained by the CFCD for flood control purposes. The					
	lake areas are	e within the Twin Lakes Golf Course.					
Surrounding Uses/Zoning	North: UPRR (Institutional)						
	South: Sa	nta Barbara Airport commercial uses south of San Pedro Creek					
	(A	irport Commercial A-C).					
	East: Tw	vin Lakes Golf Course (Major Public and Institution)					
		ight Industry M-1) west of San Pedro Creek north of Twin Lakes					
	Go	olf Course; Light Industry south of UPRR ROW and north of					
	Но	ollister Avenue (Airport Industrial Area Specific Plan Zone,					
	SP	2-6)					
Access	North to Sou	th: Eckles Road and Hollister Avenue					
Public Services	Water Supply	y Goleta Water District					
	Sewage:	Goleta Sanitary District					
	Fire: Santa Barbara County Fire Department Station 14,						
	320 Los Carneros Road						
	Other:	Goleta Union School District (elementary, junior high);					
		Santa Barbara Unified School District (high school)					

3.0 ENVIRONMENTAL SETTING

3.1 PHYSICAL SETTING

The project site is within the Goleta Valley, a gentle alluvial fan and coastal plain stretching southward from the Santa Ynez Mountains to the Pacific Ocean. The valley is incised by north-south trending drainages such as San Pedro Creek. Topography is very level within the project area. Roadways traversing the project area include three that run from east to west. The major corridor is US 101; Calle Real is the frontage road to the north, and Hollister Avenue is the business district thoroughfare to the south. The Fairview Avenue / US 101 Overpass runs north to south, perpendicular to these roadways.

Slope/Topography: Nearly level within the Goleta Valley.

Fauna: San Pedro Creek is designated critical habitat for Southern California Steelhead (*Oncorhynchus mykiss*), federally listed as an endangered species. San Pedro Creek likely provides pass-through habitat for steelhead during the winter and early spring months when water levels are high. The federally listed endangered southern steelhead was identified at the confluence of Las Vegas and San Pedro Creeks in spring 2008, just off site and downstream of the project area.

Flora: No federal or state-listed threatened or endangered flora species have been identified during protocollevel surveys within the project area. Riparian habitat including willows, sycamores, and oak trees exist along both Las Vegas and San Pedro Creeks. Ornamental shrubbery exists adjacent to US 101 shoulders and in the median strip.

Archaeological Sites: CA-SBA-60 is recorded approximately 125 feet southeast of the Project C area.

Soils: Soils throughout the project area are Camarillo fine sandy loam.

Surface Water Bodies: San Pedro Creek is an intermittently flowing creek that supports riparian vegetation along portions of the project area.

Surrounding Land Uses: San Pedro Creek is within the urban area of the City of Goleta and Santa Barbara Airport District. Recreational uses (Twin Lakes Golf Course) abut the east side of San Pedro Creek and both sides of Las Vegas Creek. Industrial uses are located west of San Pedro Creek.

Existing Structures: No structures exist within the project area. Hard bank protection, culverts, and bridges exist on San Pedro Creek.

3.2 ENVIRONMENTAL BASELINE

The environmental baseline from which the project's impacts are measured consists of the on the ground conditions described above.

4.0 POTENTIALLY SIGNIFICANT EFFECTS CHECKLIST

The following checklist indicates the potential level of impact and is defined as follows:

Potentially Significant Impact: A fair argument can be made, based on the substantial evidence in the file, that an effect may be significant.

Less Than Significant Impact with Mitigation: Incorporation of mitigation measures has reduced an effect from a Potentially Significant Impact to a Less Than Significant Impact.

Less Than Significant Impact: An impact is considered adverse but does not trigger a significance threshold.

No Impact: There is adequate support that the referenced information sources show that the impact simply does not apply to the subject project.

Reviewed Under Previous Document: The analysis contained in a previously adopted/certified environmental document addresses this issue adequately for use in the current case and is summarized in the discussion below. The discussion should include reference to the previous documents, a citation of the page(s) where the information is found, and identification of mitigation measures incorporated from the previous documents.

The conclusions of the previous certified MND are initially provided relative to approved Project C.

4.1 AESTHETICS/VISUAL RESOURCES

Wi	ll the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a.	The obstruction of any scenic vista or view open to the public or the creation of an aesthetically offensive site open to public view?				√	
b.	Change to the visual character of an area?			✓		
c.	Glare or night lighting which may affect adjoining areas?				√	
d.	Visually incompatible structures?				✓	

Previous MND Analysis

Impacts on visual resources resulting from Project C were related to the removal of one eucalyptus in Project C located at the point where the floodwall would angle away from the creek and runs along the access road. The tree is located adjacent to a Goleta Water pumping station. This impact was feasibly mitigated by measures: AES-1 Staging Area Fencing during construction; AES-2 Tree protection and Replacement Plan; and AES-3 Mitigation Planting Plan.

The following analysis is based on the *Visual Impact Assessment of the Las Vegas/ San Pedro Creeks Capacity Improvements Project*, prepared by Dudek (October 2010). The report is available for review at Santa Barbara County Flood Control District offices.

Revised Project

Existing Setting:

The existing visual setting has not changed since certification of 11NGD-00000-00008. The San Pedro Creek Project C area is within the urban area 825 feet north of Hollister Avenue. The visual character of the project site is industrial to the west, and recreational (Twin Lakes Golf Course) to the east.

Views from Hollister Avenue northward include periodic glimpses of the Santa Ynez Mountains in the background and the Twin Lakes Golf Course in the middle-ground, but are dominated by close-up views of retail and commercial development, parking lots, and the hard bank surfaces along San Pedro Creeks.

Surface water in San Pedro Creek is not an important visual element. No other surface water can be observed due to intervening culverts and/or riparian vegetation.

Vegetation is the defining component of visual character along roadways throughout the project area and is a mix of riparian, prominent skyline eucalyptus and sycamore specimens, coast live oaks, and other non-native shrubs.

County Environmental Thresholds. The County's Visual Aesthetics Impact Guidelines classify coastal and mountainous areas, the urban fringe, and travel corridors as "especially important" visual resources. A project may have the potential to create a significantly adverse aesthetic impact if (among other potential effects) it would impact important visual resources, obstruct public views, remove significant amounts of vegetation, substantially alter the natural character of the landscape, or involve extensive grading visible from public areas. The guidelines address public, not private views.

Impact Discussion:

- a. Construction of the floodwall along San Pedro Creek would not result in any noticeable impact on the visual environment experienced by motorists, bicyclists, or pedestrians travelling on Hollister Avenue, 825 feet away. The finished elevation of the floodwall would be relatively flush with the existing road grade, and the standard concrete would be consistent with the existing material treatment, such that no additional visual impact would occur. Proposed structural development would therefore not obstruct existing public views from surrounding roadways or from the UPRR, and would not create an aesthetically offensive site experienced from these public view corridors. No impacts on aesthetics/visual resources would result.
- b. The one eucalyptus adjacent to San Pedro Creek to be removed is only visible from the backside of San Pedro Creek, experienced from the industrial area adjacent to the existing Goleta Water pumping station and Goleta Building materials. This is not a publicly accessible trail. As the the mature eucalyptus tree to be removed is not visible from a public view corridor, impacts on aesthetics/visual resources would be less than significant and less than the approved Project.
- c. The proposed project would not introduce any new permanent sources of glare or night lighting which would potentially affect adjoining areas. Construction within the US 101 corridor would potentially occur during night-time hours, but this activity would be temporary, and the lighting directed to within the transportation corridor. *No impacts on aesthetics/visual quality of the area would result.*
- **d.** The proposed project would not introduce any visually incompatible structures. Construction of the floodwall along San Pedro Creek would not result in any noticeable impact on the visual environment experienced by motorists, bicyclists, or pedestrians travelling on local roadways (see impact discussion **a.,** above). *No impacts on aesthetics/visual quality would result.*

Cumulative Impacts: The City of Goleta General Plan/Coastal Land Use Plan Final EIR (City of Goleta 2006) analyzed the impacts of buildout of the community planning area on the aesthetics and visual resource of the area (Impact 3.1-1). The EIR found that the impacts of buildout on aesthetics Citywide Visual Character would be significant and unavoidable, and a Statement of Overriding Consideration was adopted. Implementation of the revised Las Vegas – San Pedro Creeks Capacity Improvements Project C would not be cumulatively considerable when considered in association with buildout of the City of Goleta Community Plan/Coastal Land Use Plan EIR.

Mitigation and Residual Impact:

The following mitigation measures as identified in 11NGD-00000-00008 would continue to reduce the revised Project C aesthetic impacts to a less than significant level:

AES-1 Staging Area Fencing – All native trees and eucalyptus trees located within temporary impact staging areas shall be avoided to the maximum extent feasible. Staging areas shall be constrained to the minimum area necessary to successfully complete project construction. Exclusionary Environmentally Sensitive Area (ESA) fencing (either chain link or other material) shall be established at the edge of the defined staging area boundary to ensure that all equipment and personnel vehicles are parked outside of the sensitive vegetation areas. No construction equipment shall be parked, stored or operated within the protected area. No fill soil, rocks or construction materials shall be stored or placed within the protected area.

Plan Requirements and Timing: This condition shall be printed on all project plans. Fencing shall be graphically depicted on all project plans.

MONITORING: The environmental monitor, Resident Engineer and/or construction inspector shall conduct site inspections to ensure compliance, including fence installation, during grading and construction.

- **AES-2** In order to protect existing native trees including oaks, sycamores, and willows and skyline eucalyptus specimens and minimize adverse effects of grading and construction onsite, a tree protection and replacement plan shall be implemented. No ground disturbance including soil compaction, soil stock piling, or grading shall occur within the critical root zone of any native or skyline tree unless specifically authorized by the approved tree protection and replacement plan. The tree protection and replacement plan shall include the following:
 - a. An exhibit showing the location, diameter and critical root zone of all native and skyline trees located onsite.
 - b. Fencing of all trees to be protected at or outside of the critical root zone. Fencing shall be at least three feet in height of chain link or other material acceptable and shall be staked every 6 feet. The applicant shall place signs stating "tree protection area" at 15-foot intervals on the fence. Said fencing and signs shall be shown on the tree protection exhibit, shall be installed and shall remain in place throughout all grading and construction activities.
 - c. The tree protection plan shall clearly identify any areas where landscaping, grading, trenching, or construction activities would encroach within the critical root zone of any native or specimen tree. All encroachment is subject to review and approval by the appropriate permitting agency.
 - d. Any proposed tree wells or retaining walls shall be shown on the tree protection plan exhibit as well as grading and construction plans and shall be located outside of the critical root zone of all protected trees unless specifically authorized.
 - i. Any encroachment within the critical root zone of native trees shall adhere to the following standards:
 - ii. Any trenching required within the critical root zone of a protected tree shall be done by hand.

- iii. Any roots one inch in diameter or greater encountered during grading or trenching shall be cleanly cut and sealed.
- e. No permanent irrigation shall occur within the critical root zone of any native or skyline tree. Drainage plans shall be designed so that tree trunk areas are properly drained to avoid ponding.
- f. Only trees designated for removal on the approved tree protection/removal plan shall be removed.
- g. The one mature non-native eucalyptus trees to be removed shall be mitigated on a 10:1 basis with 1-gallon coast live oak size saplings grown from seed obtained from the same watershed as the project site (see Mitigation Measure BIO-1 b.).
- h. Any unanticipated damage that occurs to trees or sensitive habitats resulting from construction activities shall be mitigated in a manner approved by the permitting agency. This mitigation may include but is not limited to posting of a performance security, tree replacement on a 10:1 ratio and hiring of an outside consultant biologist to assess the damage and recommend mitigation. The required mitigation shall be done immediately under the direction of the permitting agency prior to any further work occurring on site. Any performance securities required for installation and maintenance of replacement trees will be released by the permitting agency after its inspection and approval of such installation.

<u>Plan Requirements and Timing</u>: Prior to approval by the permitting agency, the contractor shall submit grading plans, building plans and the tree protection and replacement/removal plan for review and approval by the permitting agency. All aspects of the plan shall be implemented as approved.

<u>MONITORING</u>: The environmental monitor shall conduct site inspections throughout all phases of development to ensure compliance with and evaluate all tree protection and replacement/removal measures.

- **AES-3 Landscaping.** A Mitigation Planting Plan shall be implemented within and near the areas of project disturbance to the maximum extent possible considering safety, maintenance, and horticultural feasibility. The project Mitigation Planting Plan prepared by a qualified restoration biologist shall include the following:
 - a. Native specimen plants and seed stock from locally obtained sources shall be utilized for landscaping purposes.
 - b. Planting of replacement trees shall occur as close to the area of impact as possible within the Twin Lakes Golf Course. If 100-percent tree replacement on-site is not feasible, offsite mitigation shall be provided by planting of replacement trees at a site or sites within view of the project area. The replacement planting shall be monitored for a period of 5 years. This term includes the initial 3-year plant establishment period. The plantings shall be protected from predation by wild and domestic animals, and from human interference by the use of chain link or other acceptable fencing and gopher fencing during the maintenance period. All mitigation planting shall be developed in coordination with any biological resource mitigation requirements.
 - c. Restoration plantings along San Pedro Creeks shall be consistent with existing Airport and Golf Course operations, as appropriate.

Plan Requirement: The Mitigation Planting Plan shall include the above components as notes and/or specifications. The Mitigation planting plan shall be reviewed and approved by the Santa Barbara Airport and Twin Lakes Golf Course staff to ensure its consistency with Airport and Golf Course operations. **Timing:** Plans shall be reviewed and approved prior to construction by the permitting agency; vegetation shall be installed within 90 days of construction completion.

MONITORING: The environmental monitor shall check plans and ensure landscaping installation in the field.

Mitigation and Residual Impact

With the incorporation of these measures, residual impacts would be less than significant.

4.2 AGRICULTURAL RESOURCES

W i	ll the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a.	Convert prime agricultural land to non-agricultural use, impair agricultural land productivity (whether prime or non-prime) or conflict with agricultural preserve programs?				√	
b.	An effect upon any unique or other farmland of State or Local Importance?				✓	

Previous MND Analysis

No impacts on agricultural resources were identified, as no resources are located within the Project C area.

Revised Project

a-b. The project site does not contain a combination of acreage and/or soils which render the site an important agricultural resource. The site does not adjoin and/or would not impact any neighboring agricultural operations.

Mitigation and Residual Impact: No impacts are identified. No mitigations are necessary.

4.3 AIR QUALITY

Wi	ill the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a.	The violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation, or exposure of sensitive receptors to substantial pollutant concentrations (emissions from direct, indirect, mobile and stationary sources)?			√		
b.	The creation of objectionable smoke, ash or odors?			✓		
c.	Extensive dust generation?			✓		
Gr	eenhouse Gas Emissions	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
d.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	V	, and the second	✓	•	
e.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓		

Previous MND Analysis

All impacts on air quality and greenhouse gas emissions were identified as short-term, and less than significant, or having no impact. Four standard measures identified by the Santa Barbara Air Pollution Control District (APCD) (AQ-1 through AQ-4) to reduce construction-related emissions of ozone precursors to the extent feasible were recommended.

Revised Project

County Environmental Threshold:

Chapter 5 of the Santa Barbara County Environmental Thresholds and Guidelines Manual (as amended in 2008) addresses the subject of air quality. The thresholds, along with Santa Barbara County Air Pollution Control District's (SBCAPCD) *Scope and Content of Air Quality Sections in Environmental Documents* (SBCAPCD 2015), provide that a proposed project will not have a significant impact on air quality if operation of the project will:

- emit (from all project sources, mobile and stationary), less than the daily trigger for offsets of 55 pounds per day for oxides of nitrogen (NO_X) and reactive organic compounds (ROC), and 80 pounds per day for particulate matter smaller than 10 microns in diameter (PM₁₀); and
- emit (from all project sources, both stationary and mobile) less than 25 pounds per day of oxides of nitrogen (NO_X) or reactive organic compounds (ROC) from motor vehicle trips only; and
- not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone); and
- not exceed the APCD health risk public notification thresholds adopted by the APCD Board (10 excess cancer cases in a million for cancer risk and a Hazard Index of more than one [1.0] for acute and chronic, non-cancer risk); and
- be consistent with the adopted federal and state Air Quality Plans; and
- Expose new or existing receptors to objectionable odors.

The County has not established thresholds for temporary impacts associated with construction activities. The SBCAPCD also does not currently have recommended quantitative thresholds of significance for short-term construction emissions; however, the SBCAPCD uses "25 tons per year for ROC [i.e., ROG] or NO_x as a guideline for determining the significance of construction impacts" (SBCAPCD 2015). In the interest of public disclosure, the SBCAPCD recommends that construction-related NO_x, ROC, PM₁₀ and particulate matter smaller than 2.5 microns in diameter (PM_{2.5}) emissions from diesel and gasoline powered equipment, paving and other activities, be quantified.

Standard dust control measures must be implemented for any discretionary project involving earth-moving activities. Some projects have the potential for construction-related dust to cause a nuisance. Because Santa Barbara County is currently in nonattainment for the state PM₁₀ standard, dust mitigation measures are required for all discretionary construction activities (regardless of the significance of the fugitive dust impacts) based on policies within the 1979 Air Quality Attainment Plan (SBCAPCD 2015). In addition, the County's Grading Ordinance requires standard dust control conditions for all projects involving grading activities.

Greenhouse Gas Analysis Methodology. Gases that trap heat in the atmosphere are often called greenhouse gases (GHGs). Principal GHGs include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone O₃, and water vapor (H₂O). Combustion of fossil fuels constitutes the primary source of GHGs. GHGs accumulate in the atmosphere, where these gases trap heat near the Earth's surface by absorbing infrared radiation. This effect causes global warming and climate change, with adverse impacts on humans and the environment. Potential effects include reduced water supplies in some areas, ecological changes that threaten some species, reduced agricultural productivity in some areas, increased coastal flooding, and other effects. The effect each GHG has on climate change is measured as a combination of

the mass of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP). The GWP varies between GHGs and total GHG emissions are expressed as a function of how much warming would be caused by the same mass of CO₂. Thus, GHG gas emissions are typically measured in terms of pounds or tons of "CO₂ equivalents" (CO₂E). Global climate change is a cumulative impact; a project participates in the potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA 2008).

The County's current methodology to address Global Climate Change in CEQA documents is evolving. The County of Santa Barbara is currently referring to the San Luis Obispo County Air Pollution Control District (SLOCAPCD) thresholds for GHG emissions as guidance for County of Santa Barbara projects. The SLOCAPCD has established GHG emissions thresholds as defined in their CEQA Air Quality Handbook (SLOCAPCD 2012). SLOCAPCD adopted operational GHG emissions thresholds include the following, where any of these criteria can be used to evaluate a project's GHG emissions:

- Compliance with Qualified GHG Reduction Strategy; OR
- 1,150 metric tons CO₂E/year; OR
- 4.9 MT CO₂E/service population/year (residents + employees).

SLOCAPCD guidance also indicates that the short-term GHG emissions from the construction phase should be amortized over the life of the project, which is 50 years for residential projects and 25 years for commercial projects. The proposed project would not generate long-term, operational emissions. In the interest of public disclosure, this assessment includes estimated GHG emissions generated during construction of the proposed project.

Impact Discussion:

The following emissions analyses modeling and calculations are included in a Technical Appendix that is available for review at the Public Works, Flood Control and Water Conservation District offices.

a, c. Short-term Construction Emissions

Emissions associated with the revised Floodwall Project C were estimated using the California Emissions Estimator Model (CalEEMod), Version 2013.2.2, available online (http://www.caleemod.com). This model was originally released in March 2011, following the completion of the 2009 Air Quality Study Report, and is recommended by the Santa Barbara County Air Pollution Control District (SBCAPCD) for project-level review because it uses current emission factors and updated default values (SBCAPCD 2015).

For purposes of estimating project emissions, and based on information provided by the SBCFCD and CalEEMod default values, it is assumed that construction of the project would commence on or after September 15, 2015 and would last approximately 60 working days (3 months), ending in December 2015. The analysis contained herein is based on the following assumptions.

- 1. Mobilization
- 2. Clear water diversion, SWPPP and BMPs, removal of fence (hand tools)
- 3. Clearing and grubbing (hand tools and chainsaws)

The CO₂ equivalent for a gas is derived by multiplying the mass of the gas by the associated GWP, such that metric tons of CO₂E = (metric tons of a GHG) × (GWP of the GHG). CalEEMod assumes that the GWP for CH₄ is 21, which means that emissions of 1 metric ton of CH₄ are equivalent to emissions of 21 metric tons of CO₂, and the GWP for N₂O is 310, based on the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report. Although the IPCC has released subsequent Assessment Reports with updated GWPs, CARB reporting and other statewide documents utilize the GWP in the IPCC Second Assessment Report. As such, it is appropriate to use the hardwired GWP values in CalEEMod from the IPCC Second Assessment Report.

- 4. Removal of concrete slope lining and incidental surface concrete
- 5. Excavation for placement of floodwall. Approximately 2,470 cubic yards (CY) of excess excavated material would be disposed of offsite. And temporary shoring near UPRR bridge
- 6. Cantilevered floodwall installation, which would include 480 CY of concrete pumped in from Hayward Lumber
- 7. Fabric-formed concrete revetment placement and concrete swale (3 feet wide by 1.5 feet deep) placement along back of floodwall to divert water, 25 CY of permeable backfill material placed. Retrofit outlet structures.
- 8. Structural backfill: backfilled with approximately 340 CY of structure backfill and 440 CY of lean concrete backfill. Lean concrete backfill pumped from Santa Barbara Properties. And Replacement of concrete slope lining (60 CY)
- 9. Excavation of bottom of the creek at base of concrete slope lining; approximately 860 CY of rock slope protections placed.
- 10. Demobilization and clean-up.

Construction assumptions, including phase duration, workers, haul trucks, and construction equipment mix used for the emissions modeling of the revised project C is shown in Table 4.3-1, Revised Floodwall Project C Analysis Construction Assumptions (see Appendix A).

The estimated maximum unmitigated **daily** summer or winter construction emissions associated with construction of the proposed revised project in 2015, in pounds/day:

ROC: 5.31 NOx: 54.27 CO: 41.55 SOx: 0.08 PM10: 3.59 PM2.5: 2.64

Although the SBCAPCD does not currently have quantitative thresholds of significance in place for short-term or construction emissions, it uses 25 tons per year for ROC or NO_x as a guideline for determining the significance of construction impacts. The estimated **annual** unmitigated construction emissions in 2015, in tons/year.

ROC: 0.12 NOx: 1.02 CO: 0.79 SOx: 0.01 PM10: 0.79 PM2.5: 0.06

As shown above, annual construction emissions would not exceed the SBCAPCD guideline for construction-related ROC or NO_x emissions of 25 tons/year. No sensitive receptors are located near the project that would potentially be exposed to substantial concentrations of pollutant emissions. Implementation of County-required Mitigation Measure AQ-1 would ensure less-than-significant PM_{10} and $PM_{2.5}$ fugitive dust emissions and implementation of state requirements noted in Mitigation Measure AQ-2 would reduce combustion pollutants associated with equipment exhaust.

Potential impacts related to short-term construction emissions would be less than significant.

Long-Term Operations Emissions

Once the floodwall is constructed, no routine daily operational activities that would generate air pollutant emissions would occur. In the event that maintenance or repair of the floodwall and/or associated infrastructure would be required, the construction activities similar to those described above may occur on a localized portion of the floodwall system, as analyzed in the proposed project's construction emissions assessment (Appendix A). However, maintenance or repair activity would likely result in less emissions compared to the analyzed construction scenario that assumes more intensive construction over the entire project area. These potential repair activities would be temporary and would not be a source of long-term operational emissions. The proposed revised project C would not result in additional employees; therefore, there would be no additional routine vehicular traffic or associated mobile source emissions. Because the project would not result in a new land use that would involve operational activities, air quality impacts associated with operational air pollutant emissions would be less than significant

b. Visible Emissions. The proposed project is not anticipated to generate smoke or ash during construction or operation. Furthermore, compliance with SBCAPCD rules and County standards would ensure that potential impacts related to visible emissions would be minimized. The project would be required to comply with SBCAPCD Rule 302 (Visible Emissions), which prohibits emissions of visible air contaminants from any potential source of air contaminants, and Rule 303 (Nuisance), which prohibits discharge of air contaminants from any source that can cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or that can endanger the comfort, repose, health, or safety of any such persons or their business or property. Potential impacts related to visible emissions, including smoke and ash, would be less than significant.

Odors. Certain projects have the potential to cause significant odor impacts because of the nature of their operation and their location. Examples of odor-generating land uses include fast food restaurants, bakeries, and coffee roasting facilities (SBCAPCD 2015). Land uses and industrial operations that are also associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, and landfills. Odors are a form of air pollution that is most obvious to the general public. Odors can present significant problems for both the source and surrounding community. Although offensive odors seldom cause physical harm, they can be annoying and cause concern. Construction and operation of the proposed floodwall would not create objectionable odors affecting a substantial number of people.

Construction Odor Impacts. Potential sources that may emit odors during construction activities include diesel equipment and gasoline fumes. Odors from these sources would be localized and generally confined to the project site. Construction would be temporary and construction activity would not occur in one location for an extended period of time. The proposed project would utilize typical construction techniques in compliance with County and SBCAPCD rules. The project would be required to comply with SBCAPCD Rule 311, which limits the sulfur content in gas and diesel fuel, which would reduce the formation of SO_x during combustion and associated odors. As such, proposed project construction would not cause an odor nuisance, and odor impacts would be less than significant.

Operational Odor Impacts. The proposed project entails construction of a floodwall and would not result in the creation of a new land use that is commonly associated with odors. Once the project is constructed, no routine daily operational activities that would generate objectionable odors would occur. **Therefore**, **project operations would result in a less-than-significant odor impact.**

d-e. Greenhouse Gases / Global Climate Change

Previous MND Analysis

When the Final 11NGD-00000-00008 analysis was prepared, the County had implemented an interim approach to evaluating GHG emissions to address Global Climate Change in CEQA documents. The interim approach used the criteria adopted by the Bay Area Air Quality Management District (BAAQMD) to determine significance of a project's GHG emissions in its *California Environmental Quality Act – Air Quality Guidelines* (BAAQMD 2010). The BAAQMD has not adopted a threshold of significance for construction-related GHG emissions. Instead, the BAAQMD recommends quantification and disclosure of GHG emissions generated during construction, and a determination on the significance of these construction-generated GHG emission impacts in relation to meeting Assembly Bill (AB) 32 GHG reduction goals (BAAQMD 2010).

GHG emissions would be associated with the construction phase of the proposed Project C through the use of heavy equipment and vehicle trips. Consistent with County APCD guidance, all three aspects of the proposed Project, A, B, and C, are calculated together to determine if the revised Project C has the ability to collectively result in a significant impact on GHG. During the 28 months of construction, all three phases of the proposed Project would generate approximately 680 million metric tons of carbon dioxide equivalent (MTCO₂E) over the 3-year construction period. Project A, lasting 17 of those months, generates a total of approximately 412 MTCO₂E, Project B, 135 MTCO₂E, and Project C, 133 MTCO₂E.

Although the proposed project would result in emissions of GHGs during construction, the County's interim guidance does not indicate what level of construction-related GHG emissions would be considered substantial enough to result in a significant adverse impact on global climate. While all sources of GHG emissions, including construction of the proposed project, contribute to some extent to global climate change, the amount of GHG emissions generated by the proposed project would not likely impede or conflict with the State's ability to achieve the goals of AB 32.

The Climate Change Scoping Plan adopted by the California Air Resources Board in December 2008 does not include measures directed at GHG emissions associated with construction (CARB 2008). Measures adopted by California Air Resources Board to reduce NO_X, PM, and toxic air contaminant emissions from in-use diesel equipment and truck fleets would accelerate the replacement of older equipment and trucks with some secondary benefit for GHGs emissions due to improved fuel efficiency. The primary deadlines as revised in December 2010, however, would occur after completion of the project. Although not required, it is recommended that best management practices (BMPs) to reduce GHG emissions during construction be implemented consistent with the BAAQMD guidance. Recommended BMPs relating to construction equipment are provided in Discretionary Mitigation Measure AQ-3. Because the proposed project would not generate operational GHG emissions, it would result in no impacts per thresholds d, e, and f. Nonetheless, the proposed project would generate GHG emissions during the construction phase, but its cumulative impact on global climate change would be less than significant:

Revised Project

Construction GHG Emissions. Construction of the proposed floodwall Project C would result in GHG emissions associated with use of off-road construction equipment and vehicles and on-road construction and worker vehicles. CalEEMod was used to calculate the annual GHG emissions, based on the construction scenario described in above in the air quality impact assessment and Appendix A. Table 4.3-5 in the Appendix presents construction emissions for 2015. Estimates include emissions from on-site (off-road equipment) and off-site (on-road trucks and worker vehicles) sources during all construction phases.

The estimated total GHG emissions during construction would be 123 metric tons CO₂E. Additional details regarding these calculations are found in Appendix A. Although the project is not a commercial project, the life of the project is assumed to be 25 years for the purpose of applying the SLOCAPCD GHG thresholds. Estimated project-generated construction emissions amortized over 25 years would be approximately 5 MT CO₂E/year, which is much less than the significance threshold of 1,150 MT CO₂E/year. Construction-related GHG emissions would occur over 3 months and would not represent a long-term source of GHG emissions. As the project would not cause a cumulatively considerable contribution, it would result in a cumulative impact in terms of climate change that is less than significant.

Operational GHG Emissions. As discussed under the air quality analysis, the proposed project would not involve long-term operational activities. Potential maintenance or repair of floodwall and/or associated infrastructure would be temporary and would not result in a substantial source of GHG operational emissions. Accordingly, the proposed project would not generate operational GHG emissions that would have a significant impact on the environment.

GHG emissions would be associated with the construction phase of the proposed project through the use of heavy equipment and vehicle trips. Emissions of greenhouse gases would be short-term. During the 28 months of construction, the proposed project is estimated to generate approximately 680 MTCO2E over the 3-year construction period. Project A, lasting 17 of those months, would be responsible for the largest portion of CO2 emitted, generating a total of approximately 412 metric tons of CO2 equivalents (MTCO2E). Table 5 illustrates estimated greenhouse gas emissions generated by the proposed project during construction of each project. Table 6 illustrates the combined project construction emissions, representing the project's contribution to cumulative greenhouse gas impacts.

Cumulative Impacts:

Previous Analysis

The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the project has been found not to exceed the threshold of significance for air quality. Therefore, the project's contribution to regionally significant air pollutant emissions is not considerable, and its cumulative effect is less than significant.

Revised Project

Air Quality. Cumulative air quality impacts are the effect of long-term emissions of the proposed project on the projected regional air quality or localized air pollution problems in the County. The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. As discussed in the County's 1993 CEQA Guidelines (as amended in 2008), the cumulative contribution of project emissions to regional levels should be compared with existing programs and plans, including the SBCAPCD's Final 2013 Clean Air Plan (adopted by the SBCAPCD Board on March 19, 2015). To evaluate the cumulative impacts of localized pollutants, the contribution of the project's emissions to background levels should be considered. Due to the County's nonattainment status for ozone and the regional nature of the pollutant, if a project's total emissions of the ozone precursors (NO_x or ROC) exceed the long-term threshold, then the project's cumulative impacts would be considered significant. The proposed project would not generate significant long-term, operational emissions and would not exceed the thresholds of significance for air quality. Therefore, the project's contribution to regionally significant air pollutant emissions is not considerable, and its cumulative effect is less than significant.

Greenhouse Gas Emissions. The proposed project would generate short-term construction emissions, but would not generate daily operational emissions. Project construction activities would last approximately 3

months and would not generate a substantial amount of GHG emissions during construction. Furthermore, cumulative development throughout the County would incrementally increase GHG emissions. However, all new development within the County must be consistent with the County's General Plan/Local Coastal Land Use Plans; as a result, all such development would be within the projections contained in the adopted 2013Clean Air Plan. Therefore, cumulative development in the County will not hinder progress toward attainment of the County's air quality objectives, including greenhouse gas reductions, and cumulative impacts are considered less than significant.

Mitigation and Residual Impact:

The project would not result in significant project-specific short-term or long-term air quality impacts. As Santa Barbara County is currently in nonattainment for the state PM₁₀ standard, dust mitigation measures are required for all discretionary construction activities. Implementation of standard conditions placed on the grading plan as implemented through Chapter 14 (Grading Ordinance) of the County Code, along with standard SBCAPCD conditions would further reduce the project's less than significant short-term impact. The following mitigation measures, required by the APCD, the County, or state regulations would further reduce less-than-significant project-generated construction air pollutant emissions.

AQ-1 Fugitive PM₁₀ Management Measures Techniques (employ as applicable)

- a. Reduce the amount of disturbed area where possible.
- b. Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency would be required whenever wind speeds exceed 15 miles per hour. Reclaimed (i.e., non-potable) water should be used whenever possible.
- c. All dirt stockpile areas unused for more than two days should be covered and kept moist, or treated with soil binders to prevent dust generation.
- d. Permanent dust control measures identified in the approved re-vegetation plans should be implemented as soon as possible following completion of any soil-disturbing activities.
- e. Exposed ground areas that would be reworked more than one month after initial grading should be sown with a fast-germinating native grass seed and watered until vegetation is established.
- f. All disturbed soil areas not subject to re-vegetation should be stabilized using watering, or by applying approved chemical soil binders, jute netting, or other methods approved in advance by the Santa Barbara Air Pollution Control District. Within the Santa Barbara Airport Plan area, methods shall be consistent with the City of Santa Barbara Stormwater Management Plan.
- g. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading, unless seeds or soil binders are used.
- h. Vehicle speed for all construction vehicles should not exceed 15 miles per hour on any unpaved surface at the construction site.
- i. All trucks hauling dirt, sand, or other loose materials should to be tarped to and from the site.
- j. Gravel pads should be installed at all access points to prevent tracking of mud onto public roads.
- k. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties would include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Santa Barbara Air Pollution Control District.

Plan Requirements: All requirements shall be shown on grading plans. **Timing:** Condition shall be adhered to throughout all grading and construction periods.

<u>MONITORING</u>: The permitting agency shall ensure measures are on plans. The environmental monitor shall ensure compliance on-site. APCD inspectors shall respond to nuisance complaints.

AQ-2 Standard Minimization Measures for Construction Equipment

- a. Maintain all construction equipment in proper tune according to manufacturer's specifications.
- b. Fuel all off-road and portable diesel-powered equipment including, but not limited to, bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, and auxiliary power units, with motor diesel fuel certified by the California Air Resources Board (CARB) (non-taxed version suitable for off-road). All portable diesel-fired construction engines rated at 50 brake-horsepower or greater must have either statewide Portable Equipment Registration Program (PERP) certificates or APCD permits prior to operation. Construction engines with PERP certificates are exempt from APCD permits, provided that they will be on-site less than 12 months.
- c. Maximize, to the extent feasible, the use of diesel construction equipment. Diesel equipment shall meet the California Air Resources Board's (CARB) Tier 1 emission standard for off-road heavy-duty diesel engines. Equipment meeting CARB Tier 2 or higher emission standards should be used to the maximum extent feasible.
- d. Register all portable diesel-powered construction equipment with the states portable equipment registration program, or obtain an APCD permit.
- e. Limit engine idling of heavy-duty diesel construction equipment and trucks during loading and unloading to 5 minutes, pursuant to California Code of Regulations Title 13, § 2485.
- f. Avoid idling diesel-fueled auxiliary power system (APS) for more than 5 minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle.

Plan Requirements: All requirements shall be shown on grading plans. **Timing:** Condition shall be adhered to throughout all grading and construction periods.

MONITORING: The permitting agency shall ensure measures are on plans. The environmental monitor shall ensure compliance on-site. APCD inspectors shall respond to nuisance complaints.

AQ-3 Discretionary Minimization Measures for Construction Equipment

- a. Electric equipment shall be used where feasible.
- b. Substitute gasoline-powered for diesel-powered equipment, where feasible.
- c. Use alternatively fueled construction equipment onsite, where feasible, such as compressed natural gas, liquefied natural gas, propane, or bio-diesel.
- d. Equip diesel construction equipment with selective catalytic reduction systems, diesel oxidation catalysts, and diesel particulate filters as certified and/or verified by EPA or CARB.
- e. Install catalytic converters on gasoline-powered equipment, where feasible.
- f. Limit the engine size of construction equipment to the minimum practical.

Plan Requirements: All requirements shall be shown on grading plans. **Timing:** Condition shall be adhered to throughout all grading and construction periods.

MONITORING: The permitting agency shall ensure measures are on plans. The environmental monitor shall ensure compliance on-site. APCD inspectors shall respond to nuisance complaints.

AO-4. Discretionary Activity Management Techniques

a. Develop a comprehensive activity management plan designed to minimize the amount of construction equipment operating in any given time period.

- b. Schedule construction truck trips during non-peak hours to reduce peak hour emissions.
- c. Limit the length of the construction workday, if necessary.
- d. Phase construction activities, if appropriate.
- e. Minimize construction worker trips by encouraging carpooling and providing for lunch onsite.

Plan Requirements: All requirements shall be shown on grading plans. **Timing:** Condition shall be adhered to throughout all grading and construction periods.

MONITORING: The permitting agency shall ensure measures are on plans. The environmental monitor shall ensure compliance on-site. APCD inspectors shall respond to nuisance complaints.

Although not required to address a significant impact, the proposed project should incorporate measures such as energy-efficient building techniques (i.e. meeting or exceeding Title 24), incorporation of drought-tolerant or native plants, use of recycled and/or local building materials, and recycling or reusing project construction waste or demolition materials, to reduce cumulative GHG emissions.

Residual Impact

Residual impacts on air quality and greenhouse gas emissions would be less than significant.

4.4 BIOLOGICAL RESOURCES

Wi	ll the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
Flo	ra					
a.	A loss or disturbance to a unique, rare or threatened		✓			
	plant community?					
b.	A reduction in the numbers or restriction in the range				✓	
	of any unique, rare or threatened species of plants?					
c.	A reduction in the extent, diversity, or quality of		✓			
	native vegetation (including brush removal for fire					
	prevention and flood control improvements)?					
d.	An impact on non-native vegetation whether				\checkmark	
	naturalized or horticultural if of habitat value?					
e.	The loss of healthy native specimen trees?		✓			
f.	Introduction of herbicides, pesticides, animal life,		✓			
	human habitation, non-native plants or other factors					
	that would change or hamper the existing habitat?					
Fa	una					
g.	A reduction in the numbers, a restriction in the range,			\checkmark		
	or an impact to the critical habitat of any unique, rare,					
	threatened or endangered species of animals?					
h.	A reduction in the diversity or numbers of animals			\checkmark		
	onsite (including mammals, birds, reptiles,					
	amphibians, fish or invertebrates)?					
i.	A deterioration of existing fish or wildlife habitat (for			\checkmark		
	foraging, breeding, roosting, nesting, etc.)?					
j.	Introduction of barriers to movement of any resident			\checkmark		
	or migratory fish or wildlife species?					
k.	Introduction of any factors (light, fencing, noise,			\checkmark		
	human presence and/or domestic animals) which					
	could hinder the normal activities of wildlife?					

Previous Analysis

Impacts on biological resources were characterized as potentially significant but feasibly mitigated with incorporation of measures. Potentially significant impacts were associated with: the loss of native Southern Willow Scrub habitat on Las Vegas and San Pedro Creeks; removal of healthy native specimen trees; the temporary presence of heavy equipment within or adjacent to existing riparian habitat along Las Vegas and San Pedro Creek; and potential for project construction occurring during February 1 and September 1 to impact unknown raptor and migratory breeding or nesting birds. Standard measures were incorporated to reduce these potentially significant impacts to less than significant.

The impacts on habitat resources associated with Project C are restated below in Table 4.4-1.

Table 4.4-1. Approved Project Vegetation Communities/Land Covers Impacts (Permanent Impacts = P; Temporary Impacts = T)

Vegetation Community/Land Cover	Project C Impacts (P/T) Acres
Wetland Commun	ities
Southern Willow Scrub	0.05/0.12
Non-Wetland Waters of the U.SOpen Channel	0.04/0.09
Non-Wetland Waters of the U.SOpen Water	0.05/0.0
Subtotal	0.09/0.21
Non-Native Land C	overs
Annual (Non-Native) Grassland	0.0/0.01
Eucalyptus	0.0/0.01
Ornamental	0.08/0.32
Developed	1.30/1.01
Subtotal	1.38/1.35
Total	1.47/1.56

The definition of "permanent" and "temporary" impacts used in Table 4.4-1 was a worst case assessment in which "permanent" impacts are those associated with areas where existing vegetation and soils are removed resulting from project development, while "temporary" impacts are those that occur when an area is used for short-term activities during construction such as materials storage, staging, and equipment parking. This definition of "permanent" impact does not take into account the potential mitigation of vegetation removal by subsequent replanting and/or restoration. Santa Barbara County considers that effects of vegetation removal can be reduced to a "temporary, short-term" impact through the implementation of feasible replanting/restoration.

Revised Project

Existing Plant and Animal Communities/Conditions:

No changes to the composition of habitat types within San Pedro Creek and the Proposed Project C corridor are expected (see Figure 3). There are changes in the overall extent of habitats that would be impacted, as proposed floodwall construction would result in additional areas of activity within and adjacent to San Pedro Creek, and the existing ponds on the Twin Lakes Golf Course.

Thresholds:

Santa Barbara County's Environmental Thresholds and Guidelines Manual (2008) include guidelines for the assessment of biological resource impacts. The following thresholds are applicable to this project:

Riparian Habitats: Project created impacts may be considered significant due to: direct removal of riparian vegetation; disruption of riparian wildlife habitat, particularly animal dispersal corridors and or understory vegetation; or intrusion within the upland edge of the riparian canopy leading to potential disruption of animal migration, breeding, etc. through increased noise, light and glare, and human or domestic animal intrusion; or construction activity which disrupts critical time periods for fish and other wildlife species.

Individual Native Trees: Project created impacts may be considered significant due to the loss of 10% or more of the trees of biological value on a project site.

Other Rare Habitat Types: The Manual recognizes that not all habitat-types found in Santa Barbara County are addressed by the habitat-specific guidelines. Impacts to other habitat types or species may be considered significant, based on substantial evidence in the record, if they substantially: (1) reduce or eliminate species diversity or abundance; (2) reduce or eliminate the quality of nesting areas; (3) limit reproductive capacity through losses of individuals or habitat; (4) fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources; (5) limit or fragment range and movement; or (6) interfere with natural processes, such as fire or flooding, upon which the habitat depends.

Impact Discussion:

a., c. The revised Project C would result in the extension of the floodwall 150 feet farther north than previously proposed, overlapping the southerly extent of the Project B creek channel conform work by 37 feet.

The 3-feet wide by 1.5-feet deep concrete swale placed along the back of the floodwall to divert surface water downstream would result in an the removal of 0.04 acres (637-feet long by 3-feet wide) of degraded Southern Willow Scrub habitat consisting of scattered coyote bush and one coast live oak tree, along with non-native weeds, Arundo, and bare ground (see Figure 4). The existing native vegetation that would be impacted occupies 0.008 acres of the habitat area. Impacts are summarized in Table 4.4-2 below. The permanent disturbance to this habitat would be a significant impact on biological resources however incorporation of the proposed mitigation measures would reduce impacts to less than significant.

Impacts on San Pedro Creek Unvegetated Open Channel habitat associated with the northerly 37-feet of the floodwall within the Project B area have been previously assessed and mitigated. Therefore, only impacts associated with the southerly 600 feet of the floodwall within the Open Channel (averaging 27-feet wide) are considered here. Impacts on the open channel habitat would be 0.37 acres (600-feet long by 27-feet wide). A temporary construction ramp 20-long wide and 10-feet within the open channel habitat would cause 0.004 acres of disturbance within this Unvegetated Open Channel habitat. The project would result in temporary disturbance to San Pedro Unvegetated Open Creek Channel areas considered ESHA by the City of Goleta. The project design would leave the existing unvegetated open creek channel area as a natural soft-bottom. It would then be planted with a seed mix to propagate low-lying stream vegetation. Therefore, there would be no long-term, permanent conversion of Unvegetated Open Creek Channel as a result of project implementation. The temporary disturbance to this habitat would be a less than significant impact on biological resources.

Creation of the impound water feature within Project B boundaries would be planted with a seed mix to propagate low-lying stream vegetation including: mugwort (*Artemesia douglasiana*); yerba mansa (*Anemopsis californica*); spikerush (*Eleocharis macrostachys*); Santa Barbara sedge (*Carex barbarae*); toad rush (*Juncus bufonius*); and California grey rush (*Juncus patens*). Therefore, no impacts on biological resources would result. *The quality of existing open water habitat within the impound water feature would be improved, and the impact on Open Channel habitat would be beneficial.*

Table 4.4-2. Proposed Project Vegetation Communities/Land Covers Impacts (Permanent Impacts = P; Temporary Impacts = T)

Vegetation Community/Land Cover	Project C Impacts (P/T)
w.i.la	
Wetland Commu	inities
Southern Willow Scrub (Degraded)	0.04/0.00
Non-Wetland Waters of the U.S Open Channel	0.00/0.37
Non-Wetland Waters of the U.S Open Water	0.00/0.00
Subtotal	0.04/0.37
Non-Native Land	Covers
Annual (Non-Native) Grassland	0.00/0.00
Eucalyptus	0.001/0.00
Ornamental	0.00/0.00
Developed	0.51/0.00
Subtotal	0.51/0.00
Total	0.55/0.37

The loss or disturbance to these wetland plant communities is considered a significant impact on biological resources.

- **b.** Based on the results of biological surveys, the project would not result in the reduction in numbers; restriction in range; or disturbance to any rare or special status plant species. *No impacts on biological resources would occur*.
- d. Minor areas of non-native habitat above and outside of the San Pedro Creek channel would occur associated with extension of the concrete swale outside of Southern Willow Scrub habitat that would extend for 200 feet by 5-feet wide, equaling 0.02 acres of existing developed area, and 0.001 acres of non-native eucalyptus cover (see Table 4.4-2). Existing ponds on the Twin Lakes Golf Course, equaling 0.49 acres, are man-made and concrete-lined. The lining precludes growth of any riparian habitat vegetation. Golf course maintenance involves constant mechanical screening of the waters to remove golf balls. Therefore, the ponds are considered non-native habitat. An existing diversion from San Pedro Creek providing pond water would be removed, resulting in restoration of in-stream flows. *Removal of non-native areas would have no impacts on biological resources would occur*.

The revised Project C would result in the loss of one eucalyptus tree. The disturbance area is completely outside of the mapped eucalyptus woodland habitat east of the US 101/Fairview Avenue Overpass (City of Goleta 2006). The eucalyptus tree, therefore, do not represent significant nesting or roosting habitat. The loss of this habitat isolated from adjacent foraging area and abutting urban transportation corridors would be a less than significant impact on biological resources.

- e. One mature coast live oak tree would be removed under the revised Project C. The removal of a healthy native mature tree would be a significant impact on biological resource, however incorporation of the proposed mitigation measures would reduce impacts to less than significant.
- f. Temporary presence of heavy equipment would have the potential to impact existing riparian habitat along San Pedro Creek. Equipment parked within staging areas adjacent to the creeks and working within the creek could inadvertently release petrochemicals that could harm downstream habitat. The short-term introduction of construction equipment and associated pollutants would be a significant impact on biological resource, however incorporation of the proposed mitigation measures would reduce impacts to less than significant.

g-k. A reduction to the number or restriction in range of the southern steelhead trout would potentially occur during construction, as steelhead have been found in San Pedro Creek. Based on the proposed avoidance project components including pre-construction surveys, avoidance of working in flowing water, retaining aquatic habitat features (e.g., pools, riffles, and plunge pools), and implementation of standard best management practices (BMPs) (see section 4.13, Water Resources and Flooding), the proposed Project would not result in a reduction in the number, restriction in range, or impact the critical habitat of the Southern California steelhead. *This would be a less than significant impact on biological resources*.

Construction activities and associated equipment noise, increased human presence, etc. on San Pedro Creek would temporarily reduce the diversity or numbers of animals in the non-wetland waters of the U.S., including those on the Twin Lakes Golf Course. Except for the Southern California steelhead, no other faunal species of special concern are expected to be using the stream corridors during this time. Therefore, temporary disturbances to non-sensitive faunal species would be a less than significant impact on biological resources.

Though not identified to date, there is the potential for project construction occurring during February 1 and September 1 to impact unknown raptor and migratory breeding nesting birds. This is considered a potentially significant impact on biological resources however incorporation of the proposed mitigation measures would reduce impacts to less than significant.

Cumulative Impacts:

The project's impacts on biological resources would be short-term and limited to construction activity only. Long-term impacts on biological resources would be less than significant as no new land uses would be introduced, restoration of all disturbances to biological habitats would be accomplished and the vertical drop structure downstream of US 101 would be removed. Therefore, as no long-term significant impacts on biological resources would occur, the proposed project would not have a cumulatively considerable effect on the County's biological resources.

Mitigation and Residual Impact:

As noted in the project description, the proposed project includes the following components to avoid or minimize adverse impacts to the Southern California Steelhead DPS during project construction:

- 1) Pre-construction surveys shall be conducted by the USFWS-approved biologist within all suitable steelhead habitat on site immediately prior to construction to determine if steelhead are actively present in the work area.
- 2) Construction activity shall avoid actively flowing water, where feasible.
- 3) Any shallow or deep aquatic habitat including existing pools, riffles, and plunge pools shall be retained and/or restored within the impacts limits, where feasible.
- 4) Any bridge construction activities and grading resulting in ground or vegetation disturbance occurring within the channel shall occur when water levels are low, where feasible.
- 5) If dewatering is anticipated, a pump shall be used to remove water to an upland disposal site or a filtering system shall be used to collect, filter, and return clear water back to the creek(s).
- 6) The disposal or storage of paint, solvents, stucco, fuel, cement, excess soil, mortar, and other toxicants within 100 feet of sensitive resources including Las Vegas and San Pedro Creeks shall be prohibited.
- 7) A qualified biological monitor shall be present on site while crews are working within the channel bed and banks of Las Vegas and San Pedro Creeks to protect preserved biological resources and enforce project conditions and compliance.
- 8) Where appropriate, silt fences, settling basins, and other sediment control devices shall be temporarily used during construction to control sedimentation and turbidity releases.

9) Heavy equipment shall use existing access ramps, roads, and/or disturbed land covers or areas where vegetation removal is proposed as part of the project to access work areas within Las Vegas and San Pedro Creeks.

As described above, the San Pedro Creek Open Channel is subject to the CFCD Annual Routine Creeks Maintenance Program. Improvement areas would be seeded to propagate low-lying vegetation within the soft-bottom channel subsequent to construction, reducing all temporary impacts to less than significant.

The following mitigation measures would reduce the revised Project C's biological resource permanent impacts to a less than significant level.

BIO-1 The applicant shall implement the Mitigation Planting Plan to address the removal of 0.04 acres of degraded Southern Willow Scrub habitat on San Pedro Creek. The project shall provide compensatory habitat mitigation for the removal of habitat at a 3:1, replacement-to-removal ratio. Upon project completion, the 0.12 acres shall be revegetated and restored. The potential replanting/restoration area shall include all newly constructed creek banks in between proposed bridges, and these additional preliminary locations: a 10- to 15-foot corridor adjacent to existing riparian vegetation along the east bank of San Pedro Creek extending 1,400 feet south from the UPRR tracks; and existing degraded areas between US 101 and the UPRR (in part proposed for temporary project construction staging).

If needed, the CFCD shall use credits from the Los Carneros Mitigation Bank (located south of Lake Los Carneros, over 4.5 acres of mitigation are available) to address this agency's residual mitigation requirements.

The Mitigation Planting Plan shall be prepared by a qualified restoration biologist and shall include, but not be limited to, the following measures:

- a. Landscaping shall consist of native riparian Southern Willow Scrub species such as arroyo willow (*Salix lasiolepis*), coyote brush (*Baccharis pilularis*), California blackberry (*Rubus ursinus*), California Wild Rose (*Rosa california*), Wild Blackberry (*Rubus ursinus*), Chaparral Morning Glory (Calystegia macrostegia, subspecies cyslostegia), Mugwort (*Artemesia douglasiana*), Creek clemantis (*Clemantis ligusticifolia*). Species shall be from locally obtained plants and seed stock.
- b. The Mitigation Planting Plan shall provide for replacement of the 1 coast live oak, to be removed. A replacement ratio of 10:1 shall be used for the oak to be removed. (willow trees shall be mitigated by the planting of Southern Willow Scrub habitat, as identified in BIO-1a, above). Tree replacement for mitigation of visual resources impacts (Mitigation Measure AES-2.g, the replanting on a 10:1 basis with 1-gallon size saplings grown from seed obtained from the same watershed as the project site shall be credited toward this requirement.
- c. The new plantings shall be irrigated with drip irrigation on a timer, and shall be weaned off of irrigation over a period of two to three years.
- d. The creek restoration area shall be fenced with temporary construction fencing. Removal of native species in the creek shall be prohibited beyond that necessary to construct the project.
- e. Non-native species including periwinkle (*Vinca major*), giant reed (*Arundo donax*), and mustards (*Brassica* ssp.) shall be removed from the creek within project limits.

Plan Requirements: The permitting agency shall review and approve the Mitigation Planting Plan, prepared by a qualified restoration biologist. **Timing:** Planting work shall commence within 90 days of completion of capacity improvements.

MONITORING: The environmental monitor shall inspect for restoration. Maintenance shall be confirmed through site inspections.

The following measure provides additional detail to proposed project erosion and sediment control measures components:

BIO-2 Best available erosion and sediment control measures shall be implemented during grading and construction. Best available erosion and sediment control measures may include but are not limited to use of sediment basins, gravel bags, silt fences, geo-bags or gravel and geotextile fabric berms, erosion control blankets, coir rolls, and jute net. Storm drain inlets shall be protected from sediment-laden waters by use of inlet protection devices such as gravel bag barriers, filter fabric fences, block and gravel filters, and excavated inlet sediment traps. Sediment control measures shall be maintained for the duration of the grading period and until graded areas have been stabilized by structures, long-term erosion control measures or landscaping. Landscaping and restoration shall be planted as soon as feasible. If the project grading is completed between October and April, an erosion control blanket material shall be placed on exposed slopes where appropriate until plantings can commence. A layer of mulch or other equivalent sediment control measures shall be placed on exposed, graded ground surfaces and maintained until restoration plantings are completed. Construction entrances and exits shall be stabilized using gravel beds, rumble plates, or other measures to prevent sediment from being tracked onto adjacent roadways. Any sediment or other materials tracked off site shall be removed the same day as they are tracked using dry cleaning methods.

Plan Requirements: The permitting agency shall review and approve an erosion and sediment control plan. The plan shall be designed to address erosion and sediment control during all phases of development of the site. **Timing:** The plan shall be implemented prior to the commencement of grading/construction.

MONITORING: The environmental monitor shall perform site inspections throughout the construction phase.

BIO-3 To avoid impacts to all active nesting birds protected by the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section 10.13) and other bird species covered under California Fish and Game Code Sections 3503, 3503.5 and 3513, any construction activities that occur after February 15 to September 1 shall be preceded by a pre-construction active bird nest survey conducted at least one week prior to any site activities. If an active nest is located, it shall receive a 300-foot setback, and 500-foot setback for raptor nests until the young have fledged or appropriate mitigation measures have been developed and implemented in consultation with CDFG and/or USFWS. The setback zone shall be delineated with highly visible construction fencing to reduce potential impacts to nesting birds. The nest shall be monitored biweekly until it is considered to be inactive. No direct disturbance to nests shall occur until the adults and young are no longer reliant on the nest site. A qualified biologist shall confirm that breeding/nesting is completed and young have fledged the nest prior to the start of construction in the buffer zone.

Plan Requirements: This measure shall be included on all construction plans. **Timing:** Bird survey reports shall be reviewed and approved prior to construction activity occurring between and February 15 and September 1.

MONITORING: The environmental monitor shall inspect for compliance.

With the incorporation of these measures, residual impacts would be less than significant.

4.5 CULTURAL RESOURCES

Wi	ill the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
Ar	chaeological Resources					
a.	Disruption, alteration, destruction, or adverse effect on			✓		
	a recorded prehistoric or historic archaeological site?					
b.	Disruption or removal of human remains?			✓		

Wi	ll the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
c.	Increased potential for trespassing, vandalizing, or sabotaging archaeological resources?				√	
d.	Ground disturbances in an area with potential cultural resource sensitivity based on the location of known historic or prehistoric sites?			√		
Etl	nnic Resources					
e.	Disruption of or adverse effects upon a prehistoric or historic archaeological site or property of historic or cultural significance to a community or ethnic group?			✓		
f.	Increased potential for trespassing, vandalizing, or sabotaging ethnic, sacred, or ceremonial places?				√	
g.	The potential to conflict with or restrict existing religious, sacred, or educational use of the area?				✓	

Approved Project

Project C was determined to be substantially located outside of two significant cultural resources located on Las Vegas Creek, CA-SBA-60 and CA-SBA-1703. Potentially significant but feasibly mitigated to less than significant impacts were associated with Project A only.

Revised Project

Existing Setting:

<u>CA-SBA-60</u>: The boundary of CA-SBA-60, the ethnohistoric village of *S'axpilil*, is recorded approximately 125 feet southeast of the Project C area. Portions of CA-SBA-60 adjacent but outside of Project A were previously determined eligible for listing in the National Register of Historic Places (NRHP) under Criterion A and under Criterion D, as they have "yielded, or may be likely to yield, information important in prehistory or history" (Bowser and Stone 1994; Bowser and Woodman 1994; Levulett 1995; Woodman et al. 1994). The California State Historic Preservation Officer (SHPO) concurred in these determinations (Widell 1995, FHWA940103A). The portions of CA-SBA-60 closest to proposed Project C, however, have not been tested to determine if they can contribute to the NRHP listing eligibility of the site.

County Environmental Thresholds: The County Environmental Thresholds and Guidelines Manual contains guidelines for identification, significance determination, and mitigation of impacts to important cultural resources. Chapter 8 of the Manual, the *Archaeological Resources Guidelines: Archaeological, Historic and Ethnic Element,* specifies that if a resource cannot be avoided, it must be evaluated for importance under CEQA. CEQA Section 15064.5 contains the criteria for evaluating the importance of archaeological and historical resources. For archaeological resources, the criterion usually applied is: (D), "Has yielded, or may be likely to yield, information important in prehistory or history". A project that may cause a substantial adverse effect on an archaeological resource may have a significant effect on the environment.

Impact Discussion:

a, d. Proposed Project C excavations would occur approximately 125 feet from the recorded CA-SBA-60 boundary. The San Pedro Creek channel has been subject to ongoing Flood Control maintenance, and the creek banks have modified from their natural alignment that would have existed prehistorically. Therefore, it is highly unlikely that unknown cultural resources would be

encountered during Project C construction. *Potential impacts on unknown cultural resources* from Project C excavation would be less than significant.

- b. Proposed Project C excavations would occur approximately 125 feet from the recorded CA-SBA-60 boundary. Therefore, it is highly unlikely that unknown cultural resources or human remains would be encountered during Project C construction. *Potential impacts on unknown cultural resources and human from Project C excavation would be less than significant.*
- c, f. Proposed Project C excavations would occur approximately 125 feet from the recorded CA-SBA-60 boundary. Therefore, it is highly unlikely that unknown cultural resources or human remains would be encountered during Project C construction. Therefore, the potential for increased human encroachment within the CA-SBA-1703 during construction is highly unlikely. Therefore, no impact associated with the increased potential for trespassing, vandalizing, or sabotaging of significant archaeological resources would result.
- e. Chumash representatives consider CA-SBA-60 deposits significant cultural resources. The distance of Project C from the sensitive archaeological resource indicates that there is a very low potential for impacts to occur to unknown heritage resources. *Impacts on cultural resources would be less than significant.*
- g. Proposed Project C excavations would occur approximately 125 feet from the recorded CA-SBA-60 boundary. The San Pedro Creek channel has been subject to ongoing Flood Control maintenance, and the creek banks have modified from their natural alignment that would have existed prehistorically. Therefore, disturbances to CA-SBA-1703 and CA-SBA-60 deposits would not result in an impact on cultural resources relative to existing religious, sacred, or educational uses.

Cumulative Impacts:

The area of influence for evaluating cumulative impacts on archaeological resources extends throughout the area that was prehistorically occupied by the Barbareño Chumash. This area extended from Gaviota in the north to Rincon Point in the south, and inland from the coast to the Santa Ynez Mountains. Archaeological sites in this area share similar characteristics of populations who were last to inhabit the land before Missionization in the late 18th Century. It is important to recognize, however, that prehistoric archaeological sites in the area are components of a larger cultural interaction sphere that extended throughout Santa Barbara County.

Proposed Project C excavations would occur approximately 125 feet from the recorded CA-SBA-60 boundary. It is highly unlikely that unknown cultural resources or human remains would be encountered during Project C construction. Therefore, the Project C's contribution to cumulative impacts on cultural resources is less than cumulatively considerable.

Mitigation and Residual Impact:

As Project C impacts on cultural resources are less than significant, no further mitigation measures are required. The residual impact from Project C revisions would be less than significant.

4.6 ENERGY

Wi	ill the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a.	Substantial increase in demand, especially during peak			\checkmark		
	periods, upon existing sources of energy?					
b.	Requirement for the development or extension of new					
	sources of energy?				✓	

Approved Project

Approved Project A, B, and C impacts on energy were found to be less than significant.

Revised Project

The County has still not identified significance thresholds for electrical and/or natural gas service impacts (Thresholds and Guidelines Manual). The revised Project C would still result in only short-term, expenditure of energy associated with construction equipment operation. The project would have no long-term energy requirements as proposed flood control capacity improvements would not result or promulgate any new residential, commercial, industrial or institutional development. Therefore, no adverse impacts would result.

Cumulative Impacts:

The project's contribution to the regionally significant demand for energy is not considerable, and is therefore less than significant.

Mitigation and Residual Impact:

No mitigation is required. Residual impacts would be less than significant.

4.7 FIRE PROTECTION

Wi	ll the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a.	Introduction of development into an existing high fire hazard area?				✓	
b.	Project-caused high fire hazard?				✓	
c.	Introduction of development into an area without adequate water pressure, fire hydrants or adequate access for fire fighting?				✓	
d.	Introduction of development that will hamper fire prevention techniques such as controlled burns or backfiring in high fire hazard areas?				✓	
e.	Development of structures beyond safe Fire Dept. response time?				√	

Approved Project

Approved Project A, B, and C impacts on energy were found to be less than significant.

Revised Project

Impact Discussion:

a.-e. The revised Project C would is not located within a High Fire Hazard Area, and would not involve new fire hazards.

Mitigation and Residual Impact: No impacts are identified. No mitigation is necessary.

4.8 GEOLOGIC PROCESSES

Wi	ll the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a.	Exposure to or production of unstable earth conditions such as landslides, earthquakes, liquefaction, soil creep, mudslides, ground failure (including expansive, compressible, collapsible soils), or similar hazards?			✓		
b.	Disruption, displacement, compaction or overcovering of the soil by cuts, fills or extensive grading?		√			
c.	Exposure to or production of permanent changes in topography, such as bluff retreat or sea level rise?				✓	
d.	The destruction, covering or modification of any unique geologic, paleontologic or physical features?				✓	
e.	Any increase in wind or water erosion of soils, either on or off the site?			✓		
f.	Changes in deposition or erosion of beach sands or dunes, or changes in siltation, deposition or erosion which may modify the channel of a river, or stream, or the bed of the ocean, or any bay, inlet or lake?			✓		
g.	The placement of septic disposal systems in impermeable soils with severe constraints to disposal of liquid effluent?				√	
h.	Extraction of mineral or ore?				✓	
i.	Excessive grading on slopes of over 20%?				✓	
j.	Sand or gravel removal or loss of topsoil?				✓	
k.	Vibrations, from short-term construction or long-term operation, which may affect adjoining areas?			✓		
l.	Excessive spoils, tailings or over-burden?			✓		

Approved Project

Short-term potentially significant but feasibly mitigated impacts on geological resource were identified for approved Projects A, B, and C resulting from grading operations increasing the potential for erosion and sedimentation impacts. Standard erosion control mitigation measures were required to reduce impacts to less than significant. All other potential impacts were identified as adverse, but less than significant.

Revised Project

A total of 2,700 CY of removed concrete and excavated material would be disposed offsite. The previously approved Project C upland berm 1,100 feet long, between 30 feet to 100 feet wide, and between 0.75 to 2.6 feet high, would not be required.

Impact Discussion:

- a. <u>Potential to Result in Geologic Hazards</u>. Like the approved Project C, proposed excavation within San Pedro Creek does not have substantial geological constraints or slopes exceeding 20%. Grading would be limited. As such, the proposed project would result in less than significant impacts related to geological resources.
- b. <u>Potential for Grading-Related Impacts</u>. The proposed Project C grading would result in minimal grading, and would have substantially less fill required without the upland berm. *Short-term impacts on geological resources would be potentially significant however incorporation of the proposed mitigation measures would reduce impacts to less than significant.*
- c, i. <u>Potential for Permanent Changes to Topography.</u> Project grading would not result in exposure to or production of permanent changes in topography, such as bluff retreat or sea level rise. Ground disturbances would not occur on slopes exceeding 20 percent. *No impacts on geological resources associated with permanent changes to topography would result.*
- e, f., l. <u>Potential Erosion and Sedimentation Impacts</u>. Grading operations that would occur on the project site would remove vegetative cover and disturb the ground surface, thereby increasing the potential for erosion and sedimentation impacts. However, the potential for the project to cause substantial erosion and sediment transport would be adequately mitigated by County and Caltrans standard erosion control and drainage requirements. *Impacts on geological resources would be reduced to adverse, but less than significant.*
- d, g h, j. Other Potential Geological Hazards. There are no unique geological features located on the project site, and the project would not result in the use of septic systems. As such, the proposed project would not result in impacts related to geological hazards.
- k. <u>Potential Pile Driving Impacts</u>. No pile driving would occur with Project C.. As such the proposed project would result in less than significant impacts related to vribrations from short term construction.

Cumulative Impacts:

Since the project would not result in significant geologic impacts, it would not have a cumulatively considerable effect on geologic hazards within the County.

Mitigation and Residual Impact:

Measures associated with the approved Project C would apply to the Revised Project C.

GEO-1 County Structures shall be designed to earthquake standards of the Uniform Building Code Seismic Design Category D.

Plan Requirements and Timing: Caltrans and or FCD shall submit building plans indicating standards to the satisfaction of the appropriate permitting agency.

<u>MONITORING:</u> Appropriate permitting officials shall site inspect at completion. The Caltrans Resident Engineer shall monitor construction activity and inspect the structures within Caltrans ROW at completion.

GEO-2 Excavations and grading shall be limited to the dry season of the year (i.e. April 15 to November 1) unless a permitting agency approved erosion and sediment control plan is in place and all measures therein are in effect. All exposed graded surfaces shall be reseeded with ground cover vegetation to minimize erosion.

Plan Requirements: This requirement shall be noted on all grading plans. **Timing:** Graded surfaces shall be reseeded within 4 weeks of grading completion, with the exception of surfaces graded for the placement of structures. These surfaces shall be reseeded if construction of structures does not commence within 4 weeks of grading completion.

<u>MONITORING</u>: The environmental monitor shall site inspect during grading to monitor dust generation and 4 weeks after grading to verify reseeding and to verify the construction has commenced in areas graded for placement of structures.

GEO-3 Permanent erosion control measures shall be installed.

Plan Requirements: Caltrans or the FCD shall submit detailed plans and a report prepared by a licensed geologist or registered civil engineer for any proposed permanent erosion control measures for review and approval by the permitting agency. **Timing:** Erosion control plans shall be approved by the permitting agency prior to the start of construction.

<u>MONITORING:</u> The environmental monitor shall ensure installation prior to any structural development or initiation of grading.

- **GEO-4** Grading and erosion and sediment control plans shall be designed to minimize erosion and shall include the following:
 - a. Grading shall be prohibited outside of designated construction areas. The limits of construction and temporary staging areas shall be designated with orange construction fencing or other barrier to prevent entry by equipment or personnel into adjacent sensitive habitat areas.
 - b. Methods such as geotextile fabrics, erosion control blankets, retention basins, drainage diversion structures, siltation basins and spot grading shall be used to reduce erosion and siltation into adjacent water bodies or storm drains during grading and construction activities.
 - c. All entrances/exits to the construction site shall be stabilized (e.g. using rumble plates, gravel beds or other best available technology) to reduce transport of sediment off site. Any sediment or other materials tracked off site shall be removed the same day as they are tracked using dry cleaning methods.
 - d. Storm drain inlets shall be protected from sediment-laden waters by the use of inlet protection devices such as gravel bag barriers, filter fabric fences, block and gravel filters, and excavated inlet sediment traps.
 - e. Graded areas shall be revegetated as soon as possible after grading activities with deep rooted, native, drought-tolerant species to minimize slope failure and erosion potential.

Geotextile binding fabrics shall be used if necessary to hold slope soils until vegetation is established.

f. Temporary storage of construction equipment shall be limited to a areas defined by Caltrans and identified in the approved project description.

Plan Requirements: The grading and erosion and sediment control plan shall be submitted for review and approved by the permitting agency. The plan shall be designed to address erosion and sediment control during all phases of development of the site. The applicant shall notify the environmental monitor prior to commencement of grading. **Timing:** Components of the grading plan shall be implemented prior to the start of construction. Erosion and sediment control measures shall be in place throughout grading and development of the site until all disturbed areas are permanently stabilized.

MONITORING: The permitting agency shall photo-document revegetation and ensure compliance with plan. Construction inspectors shall monitor technical aspects of the grading activities.

With the incorporation of these measures, residual impacts would be less than significant.

4.9 HAZARDOUS MATERIALS/RISK OF UPSET

Will the proposal result in:		Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
а.	In the known history of this property, have there been any past uses, storage or discharge of hazardous materials (e.g., fuel or oil stored in underground tanks, pesticides, solvents or other chemicals)?				✓	
b.	The use, storage or distribution of hazardous or toxic materials?		✓			
c.	A risk of an explosion or the release of hazardous substances (e.g., oil, gas, biocides, bacteria, pesticides, chemicals or radiation) in the event of an accident or upset conditions?				√	
d.	Possible interference with an emergency response plan or an emergency evacuation plan?				√	
e.	The creation of a potential public health hazard?				✓	
f.	Public safety hazards (e.g., due to development near chemical or industrial activity, producing oil wells, toxic disposal sites, etc.)?				✓	
g.	Exposure to hazards from oil or gas pipelines or oil well facilities?				✓	
h.	The contamination of a public water supply?				✓	

Approved Project

Short-term potentially significant but feasibly mitigated impacts on hazardous materials were identified for approved Projects A, B, and C resulting from temporary use, storage or distribution of hazardous or toxic materials. The presence of Aerially Deposited Lead (ADL) was identified in shoulders next to US 101 at Las Vegas Creek and San Pedro Creek (north and south). Standard engineering mitigation measures were required to

reduce impacts to less than significant. All other potential impacts were identified as adverse, but less than significant.

Revised Project

Revised Proposed C would not have any effect on the temporary use, storage or distribution of hazardous or toxic materials during construction. No increased exposure to ADL in soils would occur, as Project C is not located in the proximity of US 101.

Impact Discussion:

<u>Hazardous Materials Thresholds:</u> The County's safety threshold addresses involuntary public exposure from projects involving significant quantities of hazardous materials. The threshold addresses the likelihood and severity of potential accidents to determine whether the safety risks of a project exceed significant levels.

- a. There is no evidence that hazardous materials were used, stored or spilled within Project C or on the Twin Lakes Golf Course ponds in the past. *No impacts on hazardous materials/risk of upset would occur.*
- **b.** Fueling of heavy equipment during construction activities would occur within staging areas. There is the potential for release of these hazardous fuels if proper storage is not provided. *An unintended release of construction equipment fuels would be a potentially significant hazardous materials impact*.
- d h. The proposed Project C would result in substantial increase of improvements to flood control infrastructure on San Pedro Creeks. These improvements would not represent public safety hazards, a potential risk of upset, or be capable of polluting a public water supply. Short-term construction traffic would be regulated by a plans and routes developed in consultation with Caltrans and the City of Goleta Community Services Department, such that no interference with emergency response capabilities to the project site or to other properties in the project area would occur. No impacts on hazardous materials/risk of upset would occur.

Cumulative Impacts:

Since the project would not create significant impacts with respect to hazardous materials and/or risk of upset, it would not have a cumulatively considerable effect on safety within the County.

Mitigation and Residual Impact:

The following mitigation measures would reduce the project's effects regarding hazardous materials and/or risk of upset to a less than significant level:

HAZ-1 Construction equipment fuels shall be stored, handled, and disposed of in a manner which minimizes the potential for risk of upset.

Plan Requirements and Timing: Bulk storage locations for construction materials and any measures proposed to contain the materials shall be shown on the grading plans submitted to the permitting agency prior to start of construction. Caltrans shall comply with 07-345 Construction Site Management standard special provision.

MONITORING: The environmental monitor shall site inspect prior to the commencement of and as needed during all grading and construction activities. The Caltrans Resident Engineer and construction inspectors routinely inspect and ensure compliance with Caltrans special provisions.

With the incorporation of these measures, residual impacts would be less than significant.

4.10 HISTORIC RESOURCES

Wi	ll the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a.	Adverse physical or aesthetic impacts on a structure or property at least 50 years old and/or of historic or cultural significance to the community, state or nation?				✓	
b.	Beneficial impacts to an historic resource by providing rehabilitation, protection in a conservation/open easement, etc.?				√	

Approved Project

No impacts on potentially architectural historic structures or formal landscape features were identified with the approved Projects A, B, and C.

Revised Project

Impact Discussion:

a, b. No potentially architectural historic structures or formal landscape features currently exist within the project site.

Cumulative Impacts:

Since the project would not result in any substantial change in the historic character of the site, it would not have any cumulatively considerable effect on the region's historic resources.

Mitigation and Residual Impact: No impacts are identified. No mitigations are necessary.

4.11 LAND USE

Wi	ll the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a.	Structures and/or land use incompatible with existing land use?				✓	
b.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? The induction of substantial growth or concentration of population?				✓ ✓	
d.	The extension of sewer trunk lines or access roads with capacity to serve new development beyond this proposed project?				√	
e.	Loss of existing affordable dwellings through demolition, conversion or removal?				✓	

Wi	ll the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
f.	Displacement of substantial numbers of existing				✓	
	housing, necessitating the construction of					
	replacement housing elsewhere?					
g.	Displacement of substantial numbers of people,				\checkmark	
	necessitating the construction of replacement					
	housing elsewhere?					
h.	The loss of a substantial amount of open space?				✓	
i.	An economic or social effect that would result in a				✓	
	physical change? (i.e. Closure of a freeway ramp					
	results in isolation of an area, businesses located in the					
	vicinity close, neighborhood degenerates, and					
	buildings deteriorate. Or, if construction of new					
	freeway divides an existing community, the					
	construction would be the physical change, but the					
	economic/social effect on the community would be					
	the basis for determining that the physical change					
	would be significant.)					
j.	Conflicts with adopted airport safety zones?				✓	

Approved Project

No impacts on land use were identified with the approved Projects A, B, and C.

Revised Project

The changes to Project C do not represent any change in the land use of the existing flood control infrastructure. Removal of the floodway berm on the City of Santa Barbara Airport Property parking lot south of San Pedro Creek would reduce potential incompatibilities with those existing uses. Filling in of the ponds on the Twin Lakes Golf Course has been requested by golf course operators to increase the playability of the resource.

Environmental Threshold: The Thresholds and Guidelines Manual contains no specific thresholds for land use. Generally, a potentially significant impact can occur if a project as proposed is potentially inconsistent with policies and standards adopted by an agency for the purposes of environmental protection or would result in substantial growth inducing effects.

Impact Discussion:

- **a, c-j.** Proposed Project C flood control capacity improvements would remain entirely within San Pedro Creek corridors that have been previously improved and maintained for this function. The project is not growth inducing, and does not result in the loss of affordable housing, loss of open space, or a significant displacement of people. The project does not involve the extension of a sewer trunk line, and does not conflict with any airport safety zones. The project is compatible with existing land uses. **Therefore, the project would have no impacts on land use.**
- **b.** The proposed project would be consistent with City of Goleta General Plan/Local Coastal Plan Policy OS CE 1.6 Protection of ESHAs. Project C revisions would have only very minor increases in impacts on Southern Willow Scrub and Open Waters habitats. Increased impacts within

Unvegetated Open Creek Channel habitat is within areas periodically subject to the annual Flood Control Maintenance activities.

The revised Project C has been designed to minimize disturbances within the San Pedro Creek corridors, including removal of Southern Willow Scrub. Restoration of Southern Willow Scrub degraded habitat identified in Mitigation Measure BIO-1 would improve the overall quality of biological habitat values within and adjacent to the project area. The proposed capacity improvements along San Pedro Creek would address inadequacies in conveying 25-year flood velocity and volumes, and would minimize flooding impacts. Therefore, no impacts on land use relative to project consistency with city of Goleta Policy CE 1.6 Protection of ESHAs would result.

The proposed project would be consistent with the following Airport Industrial Area Specific Plan Zone (SP-6), Sub-Areas 3 and 4 policies:

Policy V4: Create a pattern of development that ties in with and complements future redevelopment of Old Town Goleta with consideration of the Goleta Community Plan, UCSB's Long Range Development Plan, and the Airport Land Use Plan.

The revised Project C flood control capacity improvements would not result in any new land use development. It would provide existing and future development downstream of the project area within the Airport Land Use Plan, and Goleta Community Plan/Local Coastal Plan areas increased protection against periodic flooding activity.

Policy F1: Any development in the Specific Plan area shall be carried out in compliance with Flood Control regulations.

The revised Project C creek capacity improvements are designed to comply with County Flood Control District regulations.

Policy B2: Outside the Coastal Zone, new development shall not occur within 100 feet of U.S. Army Corps of Engineers jurisdictional wetlands without a demonstration that encroachment is necessary for the project, that wetlands within the Coastal Zone will not be affected, and that wetland functions and values shall not be impaired without mitigation. Existing facilities in the buffer outside the Coastal Zone may be retained and maintained in a normal fashion. Only compatible land uses shall be allowed within the setback.

In any wetland or creek buffer, native vegetation shall be planted and maintained in the setback wherever feasible.

The revised Project C disturbances to Southern Willow Scrub habitat within San Pedro Creek would be replanted and mitigated on a 3:1 basis.

Policy SW1: Encourage recycling, reuse, and reduction of solid waste.

Action SW1.1: New construction and major remodeling project shall develop and implement a solid waste management plan, subject to review and approval by the Santa Barbara County Public Works Department Solid Waste Division. Landscaping shall minimize excessive trimming and generation of organic waste through plant selection and design.

Demolition and disposal of existing concrete culverts would be a single activity, such that no ongoing demand on landfill capacity would occur. The proposed project would not have any long-term solid waste generation.

Therefore, the project would have no impacts on local land use policy consistency.

Cumulative Impacts:

The implementation of the project is not anticipated to result in any substantial change to the site's conformance with environmentally protective policies and standards. Thus, the project would not cause a cumulatively considerable effect on land use.

Mitigation Measures:

No impacts on land use are identified. Therefore, no mitigation is necessary.

Residual Impact:

No impacts on land use would result.

4.12 NOISE

Wi	ll the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a.	Long-term exposure of people to noise levels exceeding County thresholds (e.g. locating noise sensitive uses next to an airport)?				✓	
b.	Short-term exposure of people to noise levels exceeding County thresholds?		√			
c.	Project-generated substantial increase in the ambient noise levels for adjoining areas (either day or night)?				√	

Approved Project

Short-term construction impacts on noise identified with the approved Projects A, B, and C were considered potentially significant but feasibly reduced with standard mitigation measures.

Revised Project

The revisions to Project C would reduce the total time construction equipment would be active, as the upland flood berm requiring placement of fill would not be required.

County Threshold: County noise thresholds are: 1) increases in noise experienced by sensitive receptors in exterior areas exceeding 65 dB(A) CNEL; and 2) increases in noise experienced by sensitive receptors in interior areas exceeding CNEL 45 dB(A).

Impact Discussion:

- **a, c.** The proposed project would not result in long-term operational changes in existing land uses within the project area. *No long-term impacts on noise would result.*
- **b.** Construction noise associated with Project C would not be increased as the same types of construction equipment as those associated with the approved project would be employed. Sensitive residential receptors are not located in the vicinity of Project C. The recreational uses on Twin Lakes Golf Course would be intensified during filling of the ponds, but would be temporary for approximately 1 weeks of this export from San Pedro Creek. No new pile driving would be required.

Cumulative Impacts:

The implementation of the project is not anticipated to result in any substantial long-term noise effects. Therefore, the project would not contribute in a cumulatively considerable manner to noise impacts.

Mitigation and Residual Impact

The following mitigation measures include a restatement of activities that represent compliance with the City of Goleta Noise Element and City of Santa Barbara General Plan Noise Ordinance and would reduce the project's noise effects to a less than significant level:

NOI-1 Construction activity and construction equipment maintenance shall be limited to between 8:00 a.m. and 5:00 p.m., Monday through Friday. Construction shall generally not be allowed on weekends and state holidays. Short-term exceptions to these restrictions shall be made in extenuating circumstances (in the event of an emergency, for example) on a case-by-case basis, and shall be approved by the City of Goleta Community Services Department, or City of Santa Barbara Community Development Department, respectively, if occurring in that jurisdiction. No pile driving or jack hammering activities, however, shall occur outside of normally scheduled construction hours. All construction sites subject to these restrictions shall post the allowed hours of operation near the entrance to the site, so that workers on site are aware of this limitation. City staff shall closely monitor compliance with restrictions on construction hours, and shall promptly investigate and respond to all noncompliance complaints. Non-noise generating construction activities such as interior painting are not subject to these restrictions.

Plan Requirements: Signs stating these restrictions shall be provided by the construction contractor and posted on site. **Timing:** Signs shall be in place prior to beginning of and throughout grading and construction activities.

MONITORING: Environmental monitors shall spot check and respond to complaints.

NOI-2 All construction equipment powered by internal combustion engines shall have properly maintained sound-control devices, and no equipment shall have an unmuffled exhaust system. All diesel equipment shall be operated with closed engine doors and shall be equipped with factory recommended mufflers. Unnecessary idling of internal combustion engines shall be prohibited. Stockpiling and vehicle staging areas shall be located as far as practical from sensitive noise receptors. The construction contractors shall use equipment with best available noise control technology in regard to mufflers, acoustically treated components, etc. When feasible, noisy operations and equipment shall be located away from noise-sensitive land uses.

Plan Requirements: These conditions shall be included as notes on the grading plan submitted to the permitting agency for review prior to start of construction.

MONITORING: The environmental monitor shall site inspect prior to the commencement of, and as needed during all, grading and construction activities.

NOI-3 At least 30 days prior to commencement of construction, the contractor shall provide written notice to all property owners and building occupants within 1,600 feet of the project area that proposed construction activities could substantially affect outdoor or indoor living areas. The notice shall contain a description of the proposed project, a construction schedule including days and hours of construction, a description of noise reduction measures and the name and phone number of the Environmental Monitor who can answer questions and provide additional information or address problems that may arise associated with construction noise. A 24-hour construction hot line shall be provided. Any noise complaints received shall be documented and, as appropriate, construction activities shall be modified to the extent feasible to address such

complaints. Informational signs with the environmental monitor's name and telephone number shall also be posted at the site and shall be easily viewed from adjacent public areas.

<u>Plan Requirements:</u> These conditions shall be included as notes on the grading plan submitted to the permitting agency for review. Caltrans Resident Engineer shall document and review notices and shall respond to complaints.

MONITORING: The permitting agency environmental monitor, construction inspector, or Resident Engineer shall site inspect prior to the commencement of, and as needed during all, grading and construction activities.

With the incorporation of these measures, residual impacts would be less than significant.

4.13 PUBLIC FACILITIES

Wi	ll the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a.	A need for new or altered police protection and/or health care services?				√	
b.	Student generation exceeding school capacity?				✓	
c.	Significant amounts of solid waste or breach any national, state, or local standards or thresholds relating to solid waste disposal and generation (including recycling facilities and existing landfill capacity)?				√	
d.	A need for new or altered sewer system facilities (sewer lines, lift-stations, etc.)?				√	
e.	The construction of new storm water drainage or water quality control facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			√		

Approved Project

Short-term construction impacts on public facilities identified with the approved Projects A, B, and C were considered less than significant.

Revised Project

The proposed revisions to Project C would have no effect on public facilities.

Impact Discussion:

a–d. The proposed Project C would not result in the increase of any new residential, commercial, or industrial uses within the area. Therefore, the flood control capacity improvements would have no impact on existing police protection or health care services. Demolition and disposal of existing concrete culverts would be a single activity, such that no on-going demand on landfill capacity would occur. Therefore, the proposed project would not generate solid waste in excess of County thresholds. The flood control capacity improvements would not generate any new wastewater requiring treatment. Therefore, no impacts on Goleta Sanitary District (GSD) capacity would result. All proposed construction and requirements for modifications to GSD infrastructure have been coordinated with the GSD. *The proposed project would not create any new impervious surfaces*; *therefore, no impacts on groundwater percolation would result*.

e. Proposed drainage improvements would increase the flood control capacity of Las Vegas and San Pedro Creeks from a 10-year to 25-year storm event. Under existing conditions, a large portion of natural flow in San Pedro Creek is diverted to Las Vegas Creek upstream of Calle Real because of the lack of capacity in the existing culverts. The proposed project would increase conveyance and bridge capacity in San Pedro Creek and reduce the amount of flow diverted to Las Vegas Creek. Project design. The proposed berm and floodwall on the west side of San Pedro Creek, constructed as Project C, would address accommodate any increases in water surface elevation or inundation of adjacent properties. The increased floodwater capacity on Las Vegas and San Pedro Creeks would be a less than significant impact on public facilities.

Mitigation and Residual Impact:

As no impacts on public services would result, no mitigation is necessary.

4.14 RECREATION

Wi	ill the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a.	Conflict with established recreational uses of the area?			✓		
b.	Conflict with biking, equestrian and hiking trails?				✓	
c.	Substantial impact on the quality or quantity of existing recreational opportunities (e.g., overuse of an area with constraints on numbers of people, vehicles, animals, etc. which might safely use the area)?				✓	

Approved Project

Short-term construction impacts on recreation identified with the approved Projects A, B, and C were considered less than significant.

Revised Project

The proposed revisions to Project C would result in increased temporary impacts on golf course use during the approximately 1-week period during which the ponds would be filled, and course restoration would subsequently occur. The filling of the ponds has been requested by the operators of the City of Santa Barbara leased facility to increase the playability of the course (Andrew Bermond, City of Santa Barbara Airport District, personal communication 2014). As stated in 11NGD-00000-00008, temporary construction within the Twin Lakes Golf Course resulting from flood control maintenance activities has periodically occurred.

Impact Discussion:

- **a.** The revised Project Construction resulting in filling of the two ponds on the Twin Lakes Golf Course would be addressed by temporary golf play course alternative configurations. No substantial impacts on recreational uses of the Twin Lakes Golf Course would result. *Impacts on recreation would be less than significant.*
- **b.** Project implementation would not result in any conflicts with established biking, equestrian or hiking trails. *No impacts on recreation would result.*
- **c.** The proposed project would not result in any population increase, such that no additional demands on recreational facilities in the vicinity would result. *No impacts on recreation would result.*

Cumulative Impacts:

Since the project would not affect recreational resources, it would not have a cumulatively considerable effect on recreational resources within the County.

Mitigation and Residual Impact:

As impacts on recreation would be less than significant, no mitigation measures would be required. Residual impacts would be less than significant.

4.15 TRANSPORTATION/CIRCULATION

Wi	ll the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a.	Generation of substantial additional vehicular movement (daily, peak-hour, etc.) in relation to existing traffic load and capacity of the street system?		<			
b.	A need for private or public road maintenance, or need for new road(s)?				✓	
c.	Effects on existing parking facilities, or demand for new parking?				√	
d.	Substantial impact upon existing transit systems (e.g. bus service) or alteration of present patterns of circulation or movement of people and/or goods?		✓			
e.	Alteration to waterborne, rail or air traffic?		✓			
f.	Increase in traffic hazards to motor vehicles, bicyclists or pedestrians (including short-term construction and long-term operational)?		✓			
g.	Inadequate sight distance?				✓	
	ingress/egress?				✓	
	general road capacity?			✓		
	emergency access?				✓	
h.	Impacts to Congestion Management Plan system?				✓	

Approved Project

Short-term construction impacts on transportation identified with the approved Projects A, B, and C were considered potentially significant but feasibly reduced to less than significant with implementation of standard mitigation measures.

Revised Project

Proposed revisions to Project C would reduce the number of days construction equipment would be active, as the upland flood berm requiring placement of fill would not be required. Truck trips associated with disposal of fill would be substantially reduced by placing materials in the adjacent Twin Lakes Golf Course ponds instead of hauling it offsite.

Thresholds:

According to the County's Environmental Thresholds and Guidelines Manual, a significant traffic impact would occur when:

a. The addition of project traffic to an intersection increases the volume to capacity (V/C) ratio by the value provided below, or sends at least 15, 10 or 5 trips to an intersection operating at LOS D, E or F.

LEVEL OF SERVICE	INCREASE IN VOLUME/CAPACITY
(including project)	GREATER THAN
A	0.20
В	0.15
С	0.10
	Or the addition of:
D	15 trips
E	10 trips
F	5 trips

- b. Project access to a major road or arterial road would require a driveway that would create an unsafe situation, or would require a new traffic signal or major revisions to an existing traffic signal.
- c. Project adds traffic to a roadway that has design features (e.g., narrow width, road side ditches, sharp curves, poor sight distance, inadequate pavement structure) or receives use which would be incompatible with substantial increases in traffic (e.g. rural roads with use by farm equipment, livestock, horseback riding, or residential roads with heavy pedestrian or recreational use, etc.) that will become potential safety problems with the addition of project or cumulative traffic. Exceeding the roadway capacity designated in the Circulation Element may indicate the potential for the occurrence of the above impacts.
- d. Project traffic would utilize a substantial portion of an intersection(s) capacity where the intersection is currently operating at acceptable levels of service (A-C) but with cumulative traffic would degrade to or approach LOS D (V/C 0.81) or lower. Substantial is defined as a minimum change of 0.03 for intersections which would operate from 0.80 to 0.85 and a change of 0.02 for intersections which would operate from 0.86 to 0.90, and 0.01 for intersections operating at anything lower.

Impact Discussion:

- **a.** Revisions to Project C would not have any effect on short-term impacts impacting local roadways and intersections including Los Carneros Road, Calle Real, and Cathedral Oaks Road. In particular, the following short-term impacts associated with approved Project A would not be affected:
 - Los Carneros Road/Calle Real Intersection
 - Los Carneros Road/US 101 SB Ramps Intersection

No increased impacts on transportation/circulation would result.

- **b-c.** Revisions to Project C improvements would not result in any need for maintenance of private or public road maintenance, or need for new roads. As no new land use development is proposed there would be no effects on existing parking facilities, or demand for new parking. All construction equipment would park within designated temporary staging areas. *No increased impacts on transportation/circulation would result.*
- **d.** Revisions to Project C improvements would not result in any additional demands on the Metropolitan Transit District (MTD) Route 9, Calle Real/Old Town Shuttle, that would be potentially impacted by interruptions during the 6-month construction of the US 101/Fairview Avenue Overpass (Project A). Construction activity would possibly result in delays to this regular bus service route. *No increased impacts on transportation/circulation would result.*

- **e.** Revisions to Project C improvements would not result in any additional demands associated with the removal and reconstruction of UPRR bridges at Las Vegas Creek and San Pedro Creek (Project B) and short-term, potentially substantial alterations to rail traffic, including Amtrak passenger trains. *No increased impacts on transportation/circulation would result.*
- **f.** Revisions to Project C improvements would not exacerbate temporary US 101 lane closures, or the complete closure of the US 101/ Fairview Avenue Southbound off-ramp for 6 months (Project A). Short-term rerouted traffic on the local roadways and delays in intersection operation would not increase traffic hazards affecting motor vehicles, bicyclists, and pedestrians on Hollister Avenue, Fairview Avenue, and Calle Real. *No increased impacts on transportation/circulation would result.*
- g. Revisions to Project C improvements would not introduce roadway improvements including unsafe driveways or short-term ingress and egress, including those in the vicinity of the Calle Real/Los Carneros intersection are on the south side of roadway associated with Project A. No increased impacts on transportation/circulation would result.
- **h.** Revisions to Project C improvements would not result in any long-term increases in land use and associated traffic on the adjacent road network. *Therefore, no impacts on the Congestion Management Plan system would result.*

Cumulative Impacts:

The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the project would not contribute any long-term increases to local traffic. Therefore, the project's contribution to the regionally significant traffic congestion is not considerable, and is less than significant.

Mitigation Measures:

The following measures previously identified for Projects A, B, and Ca would be required to address short-term significant impacts on transportation/circulation during construction.

- **TR-1** CFCD shall develop a Construction Traffic Management Plan (CTMP) for review and approval by the appropriate reviewing agency, prepared in consultation with City of Goleta Community Services Department and the Santa Barbara Airport. The CTMP shall include the following:
 - a. install a temporary traffic signal at the Calle Real/Los Carneros Road intersection;
 - b. temporarily restripe the southbound US 101/Los Carneros Road Off-Ramp to allow a double left-turn movement to northbound Los Carneros Road;
 - c. potential temporary adjustments to signal timing along Calle Real between Patterson Avenue and Los Carneros Road, along Hollister Avenue, and along Cathedral Oaks Road;
 - d. construction equipment and personnel traffic routes, signage and possible website, including ingress and egress off of Hollister Avenue and US 101;
 - e. location and timing of any lane and/or road closures with minimum 5-days' notice;
 - f. contingency plan including emergency notification plan and emergency detour plan.
 - g. install a temporary traffic signal at the Carlo Drive/Calle Real intersection.

Plan Requirements and Timing: The contractor shall submit the Construction Transportation Management Plan (TMP) for review and approval by the permitting agency prior to start of construction.

MONITORING: The traffic engineer shall periodically review the implementation of TMP specifications in the field.

TR-2 CFCD shall coordinate through a Memorandum of Understanding (MOU) or equivalent mechanism with MTD to ensure that short-term interruptions of rail and bus service are minimized and that all

construction detours and temporary lane/road closures are properly anticipated. Advance notification of interruptions to normal operations shall be provided as requested by these agencies.

Plan Requirements and Timing: The CFCD contractor shall submit the MOU with MTD for review and approval by the permitting agency prior to start of construction. Caltrans shall prepare a Traffic Management Plan (TMP).

<u>MONITORING:</u> The permitting agency shall receive the MOU or equivalent mechanism with the UPRR and MTD prior to start of construction.

Residual Impacts

Implementation of mitigation measure TR-1 and TR-2 would reduce temporary construction impacts to less than significant.

4.16 WATER RESOURCES/FLOODING

Wi	ll the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
a.	Changes in currents, or the course or direction of				✓	
_	water movements, in either marine or fresh waters?					
b.	Changes in percolation rates, drainage patterns or the rate and amount of surface water runoff?				✓	
c.	Change in the amount of surface water in any water body?				✓	
d.	Discharge, directly or through a storm drain system, into surface waters (including but not limited to wetlands, riparian areas, ponds, springs, creeks, streams, rivers, lakes, estuaries, tidal areas, bays, ocean, etc) or alteration of surface water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution?		✓			
e.	Alterations to the course or flow of flood water or need for private or public flood control projects?				✓	
f.	Exposure of people or property to water related hazards such as flooding (placement of project in 100 year flood plain), accelerated runoff or tsunamis, sea level rise, or seawater intrusion?			✓		
g.	Alteration of the direction or rate of flow of groundwater?				√	
h.	Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or recharge interference?				✓	
i.	Overdraft or over-commitment of any groundwater basin? Or, a significant increase in the existing overdraft or over-commitment of any groundwater basin?				✓	
j.	The substantial degradation of groundwater quality including saltwater intrusion?				√	
k.	Substantial reduction in the amount of water otherwise available for public water supplies?				✓	

Wi	ill the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
l.	Introduction of storm water pollutants (e.g., oil,		✓			
	grease, pesticides, nutrients, sediments, pathogens,					
	etc.) into groundwater or surface water?					

Approved Project

Short-term construction impacts on water resources/flooding identified with the approved Projects A, B, and C were considered potentially significant but feasibly reduced to less than significant with implementation of standard mitigation measures.

Revised Project

Proposed revisions to Project C is designed to provide the equivalent level of flood control protection along San Pedro Creek as the previously approved project. Variation in projected storm flows downstream of Project B infrastructure resulted in this redesign.

Impact Discussion:

Water Quality Thresholds:

A significant water quality impact is presumed to occur if the project:

- Is located within an urbanized area of the county and the project construction or redevelopment individually or as a part of a larger common plan of development or sale would disturb one (1) or more acres of land:
- Increases the amount of impervious surfaces on a site by 25% or more;
- Results in channelization or relocation of a natural drainage channel;
- Results in removal or reduction of riparian vegetation or other vegetation (excluding non-native vegetation removed for restoration projects) from the buffer zone of any streams, creeks or wetlands:
- Is an industrial facility that falls under one or more of categories of industrial activity regulated under the NPDES Phase I industrial storm water regulations (facilities with effluent limitation; manufacturing; mineral, metal, oil and gas, hazardous waste, treatment or disposal facilities; landfills; recycling facilities; steam electric plants; transportation facilities; treatment works; and light industrial activity);
- Discharges pollutants that exceed the water quality standards set forth in the applicable NPDES permit, the Regional Water Quality Control Board's (RWQCB) Basin Plan or otherwise impairs the beneficial uses² of a receiving water body;
- Results in a discharge of pollutants into an "impaired" water body that has been designated as such by the State Water Resources Control Board or the RWQCB under Section 303 (d) of the Federal Water Pollution Prevention and Control Act (i.e., the Clean Water Act); or

² Beneficial uses for Santa Barbara County are identified by the Regional Water Quality Control Board in the Water Quality Control Plan for the Central Coastal Basin, or Basin Plan, and include (among others) recreation, agricultural supply, groundwater recharge, fresh water habitat, estuarine habitat, support for rare, threatened or endangered species, preservation of biological habitats of special significance.

- Results in a discharge of pollutants of concern to a receiving water body, as identified by the RWOCB.
- a, c. Revisions to Project C improvements would not result in a change in currents or the course or direction of water movements in fresh waters travelling in San Pedro Creek. Capacity improvements would occur entirely within and on the banks of existing water courses. The two lakes on the Twin Lakes golf course currently receive water seasonally via a 4-inch gravity flow pipe from a permitted water diversion on San Pedro Creek when it is flowing. The lakes do not currently act as stormwater retention features for rainfall on the golf course. Therefore, removal of the lakes would not result in any change in currents or the course or direction of water movements in fresh waters travelling in San Pedro Creek. No change in the amounts of surface waters entering downstream water bodies such as the Goleta Slough would occur. No impacts on water resources would result.
- **b, e-f.** Revisions to Project C improvements are designed to accommodate the minimal increases in surface water runoff, flow of flood waters, and surface elevation inundation of adjacent properties. *Impacts associated with flooding would be less than significant.*

Predictions about the long-term effects of global climate change include rising sea levels due to melting of glaciers and thermal expansion. Rising sea levels could increase the incidence of flooding in coastal areas with altitudes at or near sea-level. Although the exact rate of future sea level rise is unknown, the Intergovernmental Panel on Climate Change has estimated that sea levels may rise between 50 and 90 centimeters (approximately 1.6- to 3-feet) by the year 2100.³ Although the project does involve lands near sea level, the area proposed for development is situated at a minimum altitude of 30 feet above current sea level. Therefore, even if these rates of sea level rise are realized, the development area would remain well above sea level within that planning horizon.

- **d, l.** Revisions to Project C improvements would not result in a change to approved project short-term water quality impacts during construction activities. Potential construction impacts include, but are not limited to, the following:
 - Discharge of disturbed soil areas to drainage ditches and areas outside of right-of-way.
 - Tracking of sediment or construction related materials and wastes offsite and deposited on private or public paved roads by construction vehicles and equipment.
 - Dewatering depending on the time of year that construction occurs.
 - Debris from saw cutting, grinding, drilling, and concrete or mortar demolition.
 - Stockpiles of soil, construction related materials, and/or wastes.

Potential impact on surface water could result from the erosion and transport of loose soil generated during excavation, grading, and/or filling activities. Site preparation and construction activities can result in the potential for increased erosion of soils that could affect surface and ground water quality. Grading and site construction phases of future development projects would involve earth movement and the use of heavy machinery, which routinely also includes the handling of hazardous substances such as petroleum products. Construction materials, such as concrete and surface coatings, can also be released to the environment during construction, resulting in adverse water quality impacts.

Short-term water quality impacts could result from the improper management of asphalt concrete, Portland concrete cement wastes, or spilled or leaking hazardous materials, etc. These potential pollution sources could increase total suspended solids (TSS), total dissolved solids (TDS), or organic pollutants in surface waters.

³ The Intergovernmental Panel on Climate Change is a scientific intergovernmental body set up by the World Meteorological Organization (WMO) and by the United Nations Environment Programme (UNEP).

Potential water quality pollutants in stormwater runoff potentially generated during construction activities would include:

- Total Suspended Solids total suspended solids (TSS) are typically sediment produced when soil particles are eroded from the land and transported to surface waters. Erosion of native or vegetated ground usually occurs slower due to soil anchoring by root structures. Exposed soils could increase the rate of erosion, quickly entraining and transporting sediment in runoff from rain events. Suspended sediment can prevent sunlight from reaching aquatic plants, clog fish gills, choke other organisms, and bury aquatic spawning and nursery areas.
- Oil and Grease Oil and grease could be potentially leaked from construction equipment car and truck engines operating within and in the vicinity of the creeks, spilled at fueling stations within staging areas, and/or improperly discarded directly onto ground surfaces instead of being taken to recycling stations. Stormwater runoff would potentially transport these pollutants directly to creek surface waters.

The revised Project C does not affect the requirement to prepare a comprehensive Storm Water Pollution Prevention Plan (SWPPP) that regulates construction activity for review and approval by the City of Goleta, City of Santa Barbara, and Santa Barbara County Project Clean Water. For the part of the project that is in Caltrans right of way, a SWPPP would be prepared as per Caltrans standards, using the Caltrans SWPPP/ WPCP Preparation Manual, and submitted to Caltrans for review and approval prior to the commencement of any activities that have the potential to cause or contribute to water pollution.

The Storm Water Pollution Prevention Plan (SWPPP) required for this project would incorporate applicable temporary construction site Best Management Practices (BMP's) within the project limits, which also mitigate potential water quality impacts. For the Caltrans portion of this project, every temporary construction site BMP that is needed would be broken out as an individual bid item in the contract. The temporary construction site implementation strategy would be documented in the project's Stormwater Data Report (SWDR) and would be subject to the concurrence of the Caltrans Construction Stormwater Coordinator prior to final design completion. General Categories for permanent and temporary BMP's to be included in the SWPPP would include:

- Permanent Erosion Control (Construction Site BMP Manual);
- Soil Stabilization BMP's;
- Sediment Control BMP's;
- Tracking Control BMP's;
- Wind Erosion Controls:
- Non-Storm Water Management; and
- Waste Management and Materials Pollution Control BMP's.

The revised Project C would not increase the potential to significantly impact water resources over the approved project, but the above standard measures would substantially reduce and mitigate for those impacts.

g-k. The revised Project C improvements would not result in any long-term demand on additional groundwater supplies, or interference with groundwater hydrology. The water demand associated with irrigation of landscaping for biological restoration and landscaping would be short-term until the plantings were established. Replacement US 101 median planting would require a minor amount of permanent irrigation. As the landscaping would be drought-tolerant and/or native, this demand would be minute and insubstantial. *No impacts on water resources would result.*

Cumulative Impacts:

The County's Environmental Thresholds were developed, in part, to define the point at which a project's contribution to a regionally significant impact constitutes a significant effect at the project level. In this instance, the project has been found not to exceed the threshold of significance for water resources. Therefore, the project's contribution to the regionally significant issues of water supplies and water quality is not considerable, and is less than significant.

Mitigation and Residual Impact:

The following mitigation measures associated with the approved Project C and Mitigation Measure BIO-2 would reduce the project's water resource impacts to a less than significant level:

- **WR-1** Project contractors shall submit an Erosion and Sediment Control Plan or, if greater than 1.0 acre, a comprehensive Storm Water Pollution Prevention Plan (SWPPP) may be submitted in lieu of an Erosion and Sediment Control Plan. The Plan shall include the following:
 - a. Methods such as geotextile fabrics, erosion control blankets, retention basins, drainage diversion structures, siltation basins and spot grading shall be used to reduce erosion and siltation into adjacent water bodies or storm drains during grading and construction activities.
 - b. All entrances/exits to the construction site shall be stabilized (e.g., using rumble plates, gravel beds or other best available technology) to reduce transport of sediment off site. Any sediment or other materials tracked off site shall be removed the same day as they are tracked using dry cleaning methods.
 - c. Storm drain inlets shall be protected from sediment-laden waters by the use of inlet protection devices such as gravel bag barriers, filter fabric fences, block and gravel filters, and excavated inlet sediment traps.
 - d. Graded areas shall be revegetated as soon as feasible after the completion of grading activities with deep rooted, native, drought-tolerant species to minimize slope failure and erosion potential. Geotextile binding fabrics shall be used if necessary to hold slope soils until vegetation is established.
 - e. Grading on slopes steeper than 5:1 shall be designed to minimize surface water runoff.

Plan Requirements: The temporary construction entrances/exits and stock pile locations shall be located and detailed on project grading and drainage plans. Temporary and Permanent Erosion Control quantities and locations shall be detailed on the plans. **Timing:** The plans shall be submitted to the permitting agency for review and approval prior to start of construction. The stabilized entrances/exits shall be installed prior to initiation of grading and maintained for the duration of the grading period and until graded areas have been stabilized by structures, long-term erosion control measures or landscaping.

MONITORING: The environmental monitor or Caltrans Construction Engineer/Resident Engineer (RE) shall ensure that plan requirements are enforced during construction.

WR-2 The applicant shall limit excavation and grading to the dry season of the year (i.e., April 15 to November 30) unless an approved erosion and sediment control plan is in place and all measures therein are in effect. All exposed graded surfaces shall be covered with a layer of mulch or other equivalent sediment control and maintained until restoration plantings are completed to minimize erosion.

Plan Requirements and Timing: The erosion and sediment control plans shall be submitted to the permitting agency for review and approval prior to start of construction.

MONITORING: The environmental or Caltrans Construction Engineer/Resident Engineer (RE) shall ensure that plan requirements are enforced during construction.

WR-3 To prevent sediment from being tracked off of the construction site, stabilized construction entrances/exits shall be installed. Stabilizing measures may include but are not limited to use of gravel pads, steel rumble plates, temporary paving, etc. Any sediment or other materials tracked off site shall be removed the same day as they are tracked using street sweeping and vacuuming.

Plan Requirements: The stabilized construction entrances/exits and stock pile locations shall be located and detailed on the grading and drainage plan. Street sweeping and vacuuming shall be included in the project specifications and included on grading and drainage plans. **Timing:** The plans shall be submitted to the permitting agency for review and approval prior to start of construction. The stabilized entrances/exits shall be installed prior to initiation of grading and maintained for the duration of the grading period and until graded areas have been stabilized by structures, long-term erosion control measures or landscaping.

MONITORING: The environmental monitor or Caltrans Construction Engineer/Resident Engineer (RE) shall ensure that plan requirements are enforced during construction.

WR-4 To prevent storm water contamination during roadwork or pavement construction, concrete, asphalt, and seal coat shall be applied during dry weather. Storm drains and manholes within the construction area shall be covered when paving or applying seal coat, slurry, fog seal, etc.

Plan Requirements and Timing: The project plans shall include provisions to address the timing of the application of concrete, asphalt, and seal coat. It shall also include plans and provisions for storm drain inlet protection. These requirements shall be specified on the grading and building plans submitted to the permitting agency for review and approval prior to start of construction.

MONITORING: The environmental monitor or Caltrans Construction Engineer/Resident Engineer (RE) shall site inspect as needed during construction.

- **WR-5** Any material storage and stockpile areas within construction areas that could contribute pollutants and waste such as paint, mortar, concrete slurry, fuels, etc. shall be stored, handled, and disposed of in a manner which minimizes the potential for storm water contamination. The following measures are required.
 - a. Materials with the potential to contaminate storm water must either be either: placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with runoff or spillage to the storm water conveyance system; or protected by a secondary containment structure such as berm, dike, or curb and covered with a roof or awning.
 - b. The storage area shall be paved and sufficiently impervious to contain leaks and spill or otherwise be designed to prevent discharge of leaks or spills into the storm water conveyance system.
 - c. All drainage in demolition material storage container areas must be diverted from adjoining pervious surfaces.
 - d. Demolition material storage container areas shall be protected and regularly maintained to prevent off site transport of trash

Plan Requirements and Timing: Storage and stock pile areas and provisions included to address construction site management and the handling of contaminated materials shall be shown on the grading plans submitted to the permitting agency for review and approval prior to start of construction.

MONITORING: The environmental monitor or Caltrans Construction Engineer/Resident Engineer (RE) shall site inspect to ensure measures are constructed in accordance with the approved plan and periodically thereafter to ensure proper maintenance.

Specific permit requirements or mitigation measures such as Regional Water Quality Control Board (RWQCB) 401 Certification, U.S. Army Corps of Engineers 404 permit and approval by California Department of Fish and Game may be included in contract documents.

With the incorporation of these measures, residual impacts would be less than significant.

5.0 INFORMATION SOURCES

5.1 **County Departments Consulted (underline):**

Comp	prehensive Plan (check those sources use	ed):		
X	Seismic Safety/Safety Element		X	Conservation Element
X	Open Space Element	_	X	Noise Element
	Coastal Plan and Maps	_		Circulation Element
	ERME		<u>X</u>	City of Goleta General
				Plan/Coastal Land Use Plan
		_	v	(2006)
			<u>X_</u>	Santa Barbara Airport Industria Area Specific Plan
	<u> </u>	_		Area specific I fair
Other	r Sources (check those sources used:			
X	Field work			Preserve maps
X	Calculations	X	_	od Control maps
37	D ' . 1			
X	Project plans	X	_ Otl	ner technical references
X	Traffic studies		-	(reports, survey, etc.)
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6.0 PROJECT SPECIFIC (short- and long-term) AND CUMULATIVE IMPACT SUMMARY

Short-term, significant but feasibly mitigated impacts related to proposed construction activities on: aesthetics/visual resources; biological resources; cultural resources; geologic hazards; hazardous materials; noise, transportation/circulation; and water quality.

7.0 MANDATORY FINDINGS OF SIGNIFICANCE

Wi	ill the proposal result in:	Poten. Signif.	Less than Signif. with Mitigation	Less Than Signif.	No Impact	Reviewed Under Previous Document
1.	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, contribute significantly to greenhouse gas emissions or significantly increase energy consumption, or eliminate important examples of the		✓			
2.	major periods of California history or prehistory? Does the project have the potential to achieve short-term to the disadvantage of long-term environmental goals?				✓	
3.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects and the effects of probable future projects.)			√		
4.	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				√	
5.	Is there disagreement supported by facts, reasonable assumptions predicated upon facts and/or expert opinion supported by facts over the significance of an effect which would warrant investigation in an EIR?				√	

1) As discussed in Sections 4.4 and 4.5 of this Initial Study, the proposed project has the potential to substantially degrade the quality of the environment. *However, mitigation measures proposed in these sections would reduce project impacts to levels of less than significance.*

With incorporation of the mitigation measures identified in this Initial Study into the project description, the project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, contribute significantly to greenhouse gas emissions or significantly increase energy consumption, or eliminate important examples of the major periods of California history or prehistory.

DATE: 5/28/15

3) The project would not have impacts that are cumulatively considerable. As the proposed project would implement standard conditions and Best Management Practices maintained by the County of Santa Barbara and Caltrans, as well as additional measures identified in this Initial Study, *the project would not have impacts that are cumulatively considerable.*

All potentially significant impacts resulting from short-term construction of proposed flood control capacity improvement projects would be feasibly mitigated to less than significant, including those on: aesthetics/visual resources; biological resources; cultural resources; geologic hazards; hazardous materials; noise, transportation/circulation; and water quality.

8.0 PROJECT ALTERNATIVES

No project alternatives are required, as no unavoidable significant impacts would result.

9.0 INITIAL REVIEW OF PROJECT CONSISTENCY WITH APPLICABLE SUBDIVISION, ZONING AND COMPREHENSIVE PLAN REQUIREMENTS

City of Goleta General Plan/Local Coastal Plan Policy CE 1.6, Protection of ESHAs.

City of Santa Barbara Airport Industrial Area Specific Plan Zone (SP-6), Sub-Areas 3 and 4 Policies Policy V4, Policy F1, Policy B2, and Policy SW1.

10.0 RECOMMENDATION BY P&D STAFF

PROJECT EVALUATOR: David Stone, Dudek

On the basis of the Initial Study, the staff of Planning and Development:

	• •	
	Finds that the proposed project <u>WILL NOT</u> have a significant effect on the environment and, therefore, recommends that a Negative Declaration (ND) be prepared.	
—	Finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures incorporated into the REVISED PROJECT DESCRIPTION would successfully mitigate the potentially significant impacts. Staff recommends the preparation of an ND. The ND finding is based on the assumption that mitigation measures will be acceptable to the applicant; if not acceptable a revised Initial Study finding for the preparation of an EIR may result.	
	Finds that the proposed project MAY have a significant effect on the environment, and recommends that an EIR be prepared.	
<u>X</u>	Finds that from existing documents (11NGD-00000-00008) that a subsequent document (containing updated and site-specific information, etc.) pursuant to CEQA Sections 15162/15163/15164 should be prepared.	
	Potentially significant unavoidable adverse impact areas:	
	With Public Hearing X Without Public Hearing	
PREVIOUS DOCUMENT:		

11.0	DETERMINATION BY ENVI	RUNNIEN IAL HEARING OFFICER	
<u>/</u>	I agree with staff conclusions. Preparation of the appropriate document may proceed. I DO NOT agree with staff conclusions. The following actions will be taken: I require consultation and further information prior to making my determination.		
SIGNA	TURE:	INITIAL STUDY DATE:	
SIGNA	TURE:	NEGATIVE DECLARATION DATE:	
SIGNA	TURE:	REVISION DATE:	
SIGNA	TURE:Anne Almy, Supervising Planner, Plann	FINAL NEGATIVE DECLARATION DATE: 6/9/15	

12.0 ATTACHMENTS

- Figure 1 Regional Vicinity Map
- Figure 2 Approved San Pedro Creek Floodwall Berm
- Figure 3 Revised San Pedro Creek Floodwall
- Figure 4 San Pedro Creek Conform Grading Water Feature
- Figure 5 Existing Vegetation Communities and Project Impacts