

## 4.0 CUMULATIVE IMPACTS

### 4.1 INTRODUCTION

This chapter presents the requirements for cumulative impact analysis, as well as the actual analysis of the potential for the proposed project, together with other past, present, and reasonably foreseeable future projects in each resource area's cumulative geographic scope, to have significant cumulative effects. Following the presentation of the requirements related to cumulative impact analyses and a description of the related projects (Sections 4.1.1 and 4.1.2, respectively), the analysis in Section 4.2 addresses each of the resource areas for which the proposed project may make a cumulatively considerable contribution to cumulative impacts (i.e., result in a significant cumulative impact), when combined with other reasonable and foreseeable projects in the area.

#### 4.1.1 Requirements for Cumulative Impact Analysis

A number of proposed development projects could occur in Santa Barbara County at the same time as the proposed SCC project. In accordance with the federal guidelines implementing NEPA and state guidelines implementing CEQA, the cumulative impacts of the proposed project, when combined with other past, present, and reasonably foreseeable future projects, programs, and plans are evaluated in this EIS/EIR. Therefore, the cumulative impact analysis focuses on whether the impacts of the proposed project are cumulatively considerable within the context of impacts caused by other past, present, or future projects.

NEPA (40 CFR 1508.7 and 40 CFR 1508.25[a][2]) and CEQA Guidelines (14 CCR 15130) require a reasonable analysis of the significant cumulative impacts of a proposed project. Cumulative impacts are defined by CEQA as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (State CEQA Guidelines, Section 15355).

Cumulative impacts are further described as follows:

- a) The individual effects may be changes resulting from a single project or a number of separate projects; and
- b) The cumulative impacts from several projects are the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (40 CFR 1508.7 and State CEQA Guidelines, Section 15355[b]).

Furthermore, according to CEQA Guidelines Section 15130(a)(1):

*As defined in Section 15355, a “cumulative impact” consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.*

In addition, as stated in CEQA Guidelines, Section 15064(i)(5):

*The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable.*

NEPA also requires analysis of cumulative impacts; 40 CFR Section 1508.7 states:

*Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.*

Therefore, the following cumulative impact analysis focuses on whether the impacts of the proposed project are cumulatively considerable within the context of impacts caused by other past, present, or future projects. The cumulative impact scenario considers other projects proposed within the area defined for each resource that have the potential to contribute to cumulatively considerable impacts.

For this EIR/EIS, related area projects with a potential to contribute to cumulative impacts were identified using one of two approaches: the “list” methodology or the “projection” methodology. Most of the resource areas were analyzed using a list of closely related projects that would be constructed in the cumulative geographic scope (Table 4-1).

#### 4.1.2 Projects Considered in the Cumulative Analysis

A total of 56 present or reasonably foreseeable future projects (approved or proposed) were identified within the general vicinity of the proposed project that could contribute to cumulative impacts. A list of the cumulative projects provided by the City of Goleta and the County of Santa Barbara is provided in Table 4-1, and the corresponding locations of these projects are shown on Figure 4-1.

**Table 4–1. Related Projects**

Map #	Project Name	Project Location/Description	Status
CITY OF GOLETA			
1	Fairview Commercial Center; 01-SB-DP; CUP	151 S. Fairview Ave.: 16,885 SF mixed use building (10,115 SF retail space, 5,460 SF office space), 2 units	Pending
2	Dwight Gregory; 02-057-LUP	879 S. Kellogg Ave.: 2,346 SF commercial addition	Pending
3	Bermant: Technology Drive Industrial (KS 7A) 02-081-DP et al	West side of Technology Drive: TM of 8 lots; 68,000 SF among 8 commercial/ industrial buildings and 92,070 SF outside storage area of 265,695 SF outside storage area	Pending
4	University Properties; 25-SB-PM; 26-SB-PD	SEC Technology and Thornwood Drives: TPM of 4 parcels and 5,427 SF industrial building (and potential for approximately 15,000 SF additional development)	Pending
5	Stokes Industrial Building; 02-084-DP	East side of Technology Drive: 5,000 SF industrial building	Pending
6	Islamic Society of Santa Barbara; 03-051-DP; CUP	NEC Los Carneros and Calle Real: 7185 SF building for Islamic Center and attached apartment (1 dwelling unit)	Pending
7	Pacific Technology Center/GRC Lotsplit; 03-062-PM; DP et al	5383 and 5385 Hollister Avenue: TPM for 2 parcels 12,040 SF (net new) professional institutional (and potential for approximately 30,000 SF additional development)	Pending
8	Winnikoff; 22-SB-DP	260 Storke Road: New 2,232 SF office building	Pending
9	BDC/Joslyn; 71-SB-PM, -DP	6830 Cortona Drive: TPM of 3 parcels, 171,526 SF M-RP buildings	Pending
10	Los Carneros Pointe; 45-SB-DP, -RZ, -OA, etc.	Los Carneros Road/Los Carneros Way: 31,051 SF commercial development including a day-care facility, restaurant, shops, and office	Pending
11	McClean’s Auto Body; 65-SB-DP	5989 Daley Street: Development Plan for 1,963 SF auto body shop	Pending

**Table 4–1. Related Projects (continued)**

<i>Map #</i>	<i>Project Name</i>	<i>Project Location/Description</i>	<i>Status</i>
CITY OF GOLETA (CONTINUED)			
12	Meyer-Thrifty; 64-SB-DP	5971 Placencia Street: <2,000 SF car rental agency office	Pending
13	Page Hotel; 35-SB-DP et al	West side of Kellogg at Ekwill alignment: 247 room hotel, 11,000 SF spa, and 6,000 SF restaurant	Pending
14	Sares-Regis; 36-SB-SCD	6767 Hollister Avenue: 2,800 SF storage space	Pending
15	Cabrillo Business Park; 37-SB-DP et al	6767 Hollister Avenue: Business Park with new structures totaling 704,600 SF (R&D, self storage, onsite service related uses)	Pending
16	Costco Gas Station; 40-SB-DP	7095 Marketplace Drive: 10,800 SF 4-island gas station	Pending
17	Village at Los Carneros; 03-050-TM, -DP, etc.	South Los Carneros Road, Cortona/Castilian Drives: 265 housing units	Pending
18	Taylor Parcel Map; 03-053-PM	590 North Kellogg Avenue: 2 new parcels	Pending
19	PR Ranch; 30-SB-CUP	7400 Cathedral Oaks Road: 1 unit agricultural worker dwelling	Pending
20	Hira Mixed Use Project; 03-111-PRE	5718 Hollister Avenue: 22 units, 1,827 SF retail space	Pre-application
21	Sandpiper Golf Course Renovations; 32-SB-DP, et al	7925 Hollister Avenue: Renovation and redevelopment of existing golf course	Pending (Inactive)
22	Gordon Mixed Use Project; 49-SB-CUP/LUP	345 Pine Avenue: 3,462 SF commercial building including 2 apartments	Pending
23	Good Shepherd Lutheran Church; 03-136-DP	380 North Fairview Avenue: Addition of 18,000 SF parish hall	Pending
24	Fairview Gardens; 03-159-CUP	598 North Fairview Avenue: 5 units for farmworker housing (2 trailers, 3 yurts) 1 trailer for kitchen facilities, 1 yurt for a farm office (127 SF)	Pending
25	Citrus Village; 04-226-DP; TM	7388 Calle Real: 11 units	Pending
26	Guerrero Duplex; 01-107-LUP	5737 Armitos Avenue: 1 new unit (duplex)	Pending
27	Barcara Expansion; 05-034-DP; -TM	8301 Hollister Avenue: 62 hotel suites	Pending
28	Housing Authority; 05-059-PM; DP AM02	5575 Armitos Avenue: Division of 4.06 acres into three parcels of 1.63, 2.19, and 0.24 acres; addition of 1 new assisted living unit (4 rooms)	Pending
29	City of Goleta Western Snowy Plover Habitat Management Plan; 05-116-DP	Ellwood-Devereux: Western Snowy Plover Habitat Management Plan	Pending
30	Rancho Mobile Home Park Subdivision (Guggenheim); 05-140-TM	7465 Hollister Avenue: Subdivision of a 17.84 acre rental mobile home park property (150 existing mobile homes)	Pending
31	Apostolic Assembly Faith in Jesus Christ; 05-179-CUP	7340 Hollister Avenue: Church use occupying a 3,200 SF M-RP building	Pending
32	Happy Harry's Produce; 46-SB-LUP	7020 Calle Real: 2,984 SF neighborhood produce market	Pending
33	Campus Pointe; 34-SB-DP; 38-SB-PM et al (Lots 2 and 5)	South Los Carneros Road, Cortona/Castilian Drives: 2 M-RP buildings totaling 204,000 SF	Approved (On Hold)
34	Camino Real Marketplace Skating Facilities; 95-DP-026	Santa Felicia Drive: 46,000 SF ice rink, 85' x 200' roller rink	Approved
35	Live Oak Unitarian Church Phase 2; 92-CP-066	820 North Fairview Avenue: 2,996 SF sanctuary, 316 SF restroom facility	Approved

**Table 4–1. Related Projects (continued)**

<i>Map #</i>	<i>Project Name</i>	<i>Project Location/Description</i>	<i>Status</i>
CITY OF GOLETA (CONTINUED)			
36	Fairview Corporate Center; 74-SB-DP	420 South Fairview Avenue: 65,600 SF M-RP building	Approved
37	Yardi; 01-DP-001	5901, 5949, 5959, and 5979 Hollister Avenue: 6 units (apartments), 44,000 SF office space, and 7,850 SF retail space. Existing onsite development includes 24,720 SF.	Approved
38	Sumida Gardens; 94-DP-007 RV01 03-098-LUP	5501 Overpass Road: 200 units	Approved
39	El Encanto Apartments; 99-DP-045 et al	7388 Calle Real: 16 units	Approved (On Hold)
40	Quixote Fund; 00-DP-030	275 Mathilda Drive: 2 units	Approved
41	Robinson LLA-related lots	Barker, Violet, and Daffodil Lanes: 13 units (6 unbuilt and 7 under construction)	Approved
42	Nuovo Edificio; 28-SB-DP	747 S. Kellogg Avenue: 3,635 SF industrial building	Approved
43	Old Town Inn and Village; 63-SB-RZ, TM, DP	5665 Hollister Avenue: 51,247 SF 98-room hotel, 998 SF retail/commercial space, and 59,105 SF for 37 units and garages	Approved
44	Comstock Homes; 67-SB-TM	7800 block of Hollister Avenue: 62 single family dwelling units	Approved
45	Cislo; 04-03-DP AM01	757 S. Kellogg Avenue: Remove office trailer, add 900 SF to existing developed M-1 property	Approved
COUNTY OF SANTA BARBARA			
46	Ellwood Apartments; 19-SB-DP	360 Ellwood Beach Drive: 8 units	Under Construction
A	Santa Barbara Ranch Project; 03DVP-00000-00041	Santa Barbara and Dos Pueblos Ranches: 54 new single-family homes on 485 acres; and 72 new single-family homes on 3,254 acres.	In process
B	Morehart Land Company; 05DVP-0000-00010	Within Naples Townsite, south of Hwy 101, on the western edge of Santa Barbara Ranch: 8 new single-family dwellings on 14 acres.	Pending
C	Dos Pueblos Naples Residential Development (Makar); 05RE-00000-00004	South of Hwy 101, east of Santa Barbara Ranch at Naples and west of Tomate Canyon: Merge 25 antiquated lots on 63 acres into 10 new lots and construct a single family dwelling on each lot.	Complete
D	Dos Pueblos Ranch Estates Lot 1 (Makar); 06CHE-00000-00038	South of Hwy 101, west of Bacara Resort: 6,505 SF dwelling unit with 680 SF attached garage, 861 SF guest house, and 506 SF garage on 65 acres.	In process
E	Dos Pueblos Ranch Estates Lot 2 (Makar); 06CHE-00000-00038	South of Hwy 101, west of Bacara Resort: 9,436 SF dwelling with 792 SF detached garage and 928 SF guest house with 293 SF attached garage on 78 acres.	In process
F	Eagle Canyon Ranch (Parsons); 05LLA-00000-00007	0.5 miles west of Bacara Resort: Merge 7 existing lots on 1,060 acres into 4 new lots and establish an area for a dwelling on each lot.	Pending
G	Ballantyne Single Family Residential; 05LUP-00000-00611	500 Farren Road: 13,296 SF dwelling unit with attached garage, detached guesthouse, and detached barn on 17 acres.	Pending
H	Tecolote Canyon (Wallover); 04PRE-00000-00012	North of Rancho Embarcadero and west of Goleta: Create 26 residential lots and one 984 acre lot for agricultural use and a nature preserve on 1,047 acres for single family residential development.	Complete
I	Braunger; 05COC-00000-00006	2 miles north of Las Varas Ranch: Conditional certificates of compliance for four parcels on 53 acres.	Pending
J	Miller New SFD	1560 San Roque Road: 1 single family dwelling unit.	

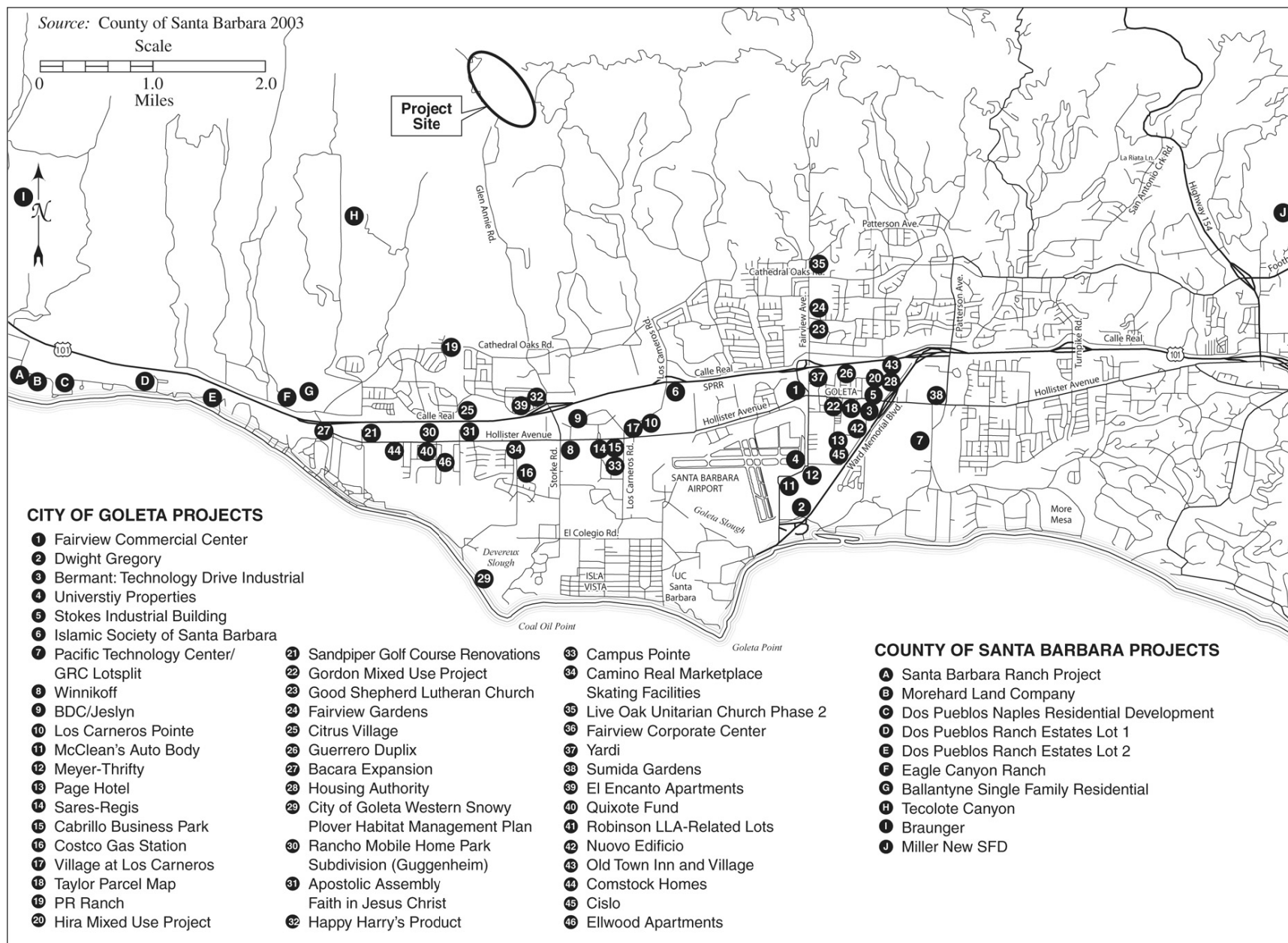


Figure 4-1. Related Projects Map

## 4.2 CUMULATIVE IMPACT ANALYSIS

### 4.2.1 Aesthetics/Visual Resources

Reasonably foreseeable development listed in Table 4-1 includes buildout of the Santa Barbara County and City of Goleta, including residential, commercial, and industrial projects. Many of the infill projects would not likely contribute to a substantial change in the region's visual resources or character, as they would be surrounded by existing residential or commercial structures and landscaping that have defined precedents for height, massing, landscaping, and color, and would be within smaller parcels that do not have relatively important topographic, vegetation, or other unique visual qualities. However, many of the future developments within the unincorporated County areas represent larger expanses of undeveloped, natural lands on the periphery of the City of Goleta. These sites, such as Santa Barbara Ranch, Dos Pueblos Naples Residential Development, and Eagle Canyon Ranch, contain important visual qualities that would be compromised by their development, as experienced from surrounding views. The conversion of undeveloped, natural areas to residential, commercial, and/or industrial development under reasonably foreseeable cumulative buildout would likely result in significant impacts on important visual resources.

Existing views of the proposed project area from public view corridors, including U.S. 101 and Cathedral Oaks Road, are extremely limited due to distance from the project site, intervening topography, and dense vegetation. Views of important visual resources from U.S. 101 and Cathedral Oaks Road would be ephemeral; therefore, vehicles traveling on these roadways would not be capable of discerning any changes to the project area. Short-term impacts resulting from construction activities (i.e., clearing, grubbing, grading, and excavation) would temporarily alter the visual character of the project site and its surroundings. The project would not introduce new sources of light and glare; construction would occur during daylight hours; and project operations would not include any new lighting fixtures. Implementation of **Mitigation Measures AES-2, BIO-1.2, BIO-2.1, BIO-2.2, and BIO-4a** would maintain the existing visual character of the project site, reducing this adverse contribution so that residual impacts would be less than significant. As the proposed project would not substantially alter any scenic vistas, degrade the existing visual character, or produce substantial light or glare, the project's contribution to cumulative effects would result in a less than significant cumulative impact.

### 4.2.2 Air Quality

Santa Barbara County currently attains all ambient air quality standards except the State ozone (O<sub>3</sub>) and particulate matter less than 10 microns in diameter (PM<sub>10</sub>) standards. These nonattainment conditions for ambient O<sub>3</sub> and PM<sub>10</sub> within the project region are therefore cumulatively significant. Reasonably foreseeable future projects identified in Table 4-1 that would overlap in time with the project would contribute to these significant cumulative impacts.

Emissions of O<sub>3</sub> precursors and PM<sub>10</sub> emissions from the proposed construction activities, in combination with emissions from future sources and approved projects in the region, would exacerbate the existing O<sub>3</sub> and PM<sub>10</sub> nonattainment conditions within the County. However, all construction activities would be required to implement standard APCD dust control measures and construction emissions are included in the County air attainment planning process. As a result, proposed construction activities would produce less than significant cumulative impacts.

Emissions of O<sub>3</sub> precursors and PM<sub>10</sub> due to operation of the proposed project, in combination with emissions from future sources and approved projects in the region, would exacerbate the existing ozone nonattainment status within the County. However, emissions from operation of the project would not exceed the operational daily thresholds of 25 pounds of NO<sub>x</sub> and ROG for motor vehicle trips. As a result, operation of the project would produce less than significant cumulative air quality impacts (APCD 2007b).

### 4.2.3 Biological Resources

Projects identified for the cumulative analysis primarily include infill projects within the greater developed area of the City of Goleta. These projects would have few, if any, direct biological impacts. However, several of the projects within the unincorporated County areas could have impacts on biological resources, such as sensitive plant species, native grasses, oak trees, and riparian habitat that would be cumulatively significant but feasibly mitigated. Any losses of oak woodland, however, would be cumulatively significant and unavoidable. Assuming that all other significant impacts of these projects are mitigated through the environmental review and permitting processes for each project, their cumulative impacts on all but oak woodland would be less than significant.

The proposed project would have significant impacts to special status species (**Impact BIO-1**), special status natural vegetation communities (**Impact BIO-2**), migratory bird breeding (**Impact BIO-3**), local biological communities through introduction of invasive species (**Impact BIO-4b**), and oak trees protected by local ordinance (**Impact BIO-5**), prior to mitigation that could contribute substantially to cumulative effects of past, present, and future projects. With implementation of the mitigation measures described in Section 3.3, residual impacts of the proposed project would be less than significant, and the project's contribution to cumulative effects would result in a less than significant cumulative impact for all but the loss of oak woodland. The project's contribution to loss of oak woodland habitat would be cumulatively significant and unavoidable.

### 4.2.4 Cultural Resources

The proposed project, together with other reasonably foreseeable projects identified in Table 4.1 could have a cumulatively significant impact on the remaining archaeological resources in the region. Reasonably foreseeable development would include ground disturbing activities during construction (i.e., clearing, grubbing, grading, and excavation) that could potentially affect prehistoric and historic archaeological sites, and historic structures. Impacts would be addressed for each discretionary project during plan review, and standard conditions would be applied as necessary to minimize these effects, resulting in a less than significant cumulative impact.

Ground disturbing activities associated with the proposed project could result in significant adverse effects, therefore contributing substantially to cumulative effects on cultural resources prior to mitigation. However, implementation of **Mitigation Measure CR-1** would minimize the project's potential for disturbing archaeological resources. Therefore, the project's contribution to cumulative effects would result in a less than significant cumulative impact.

### 4.2.5 Geology and Soils

#### **Erosion**

Numerous approved and probable future projects within the Goleta Slough watershed (e.g., Fairview Commercial Center, Dwight Gregory, University Properties, Islamic Society of America, Los Carneros Pointe, and Cabrillo Business Park) would contribute to erosion-induced sedimentation of local creeks and the slough. The sediment load contribution of these projects could result in cumulatively significant but feasibly mitigated impacts on water quality. The EPA's recently enacted NPDES Phase II stormwater quality regulations have resulted in more stringent review of discretionary projects. The City of Goleta Planning and Environmental Services Department and Santa Barbara County Planning & Development Department would review all related development proposals for consistency with the adopted statutes. Implementation of BMPs associated with probable future related project SWPPPs would reduce cumulative regional impacts of erosion on stormwater quality to less than significant.

Project construction would result in short-term exposure of onsite soils, which are highly prone to wind and water erosion due to the steep topography and erodible soils along the pipeline corridor. Although pipeline corridor revegetation would occur subsequent to construction, thus minimizing the potential for long-term soil erosion, the potential for substantial short-term soil erosion that could cause increased sediment runoff into the West Fork and main stem of Glen Annie Creek would remain until the disturbed soils are stabilized. Such effects would, prior to mitigation, contribute substantially to cumulative effects of past, present, and future projects. Implementation of a SWPPP and associated construction BMPs (**Mitigation Measure GEO-2**) would ensure that project-specific residual impacts of erosion on water quality would be less than significant. Therefore, the project's contribution to cumulative effects would result in a less than significant cumulative impact.

Water quality impacts are further discussed in Section 4.2.7.

## **Seismicity and Ground Failure**

Related approved and probable future construction projects in the project vicinity (e.g., Fairview Commercial Center, Dwight Gregory, University Properties, Islamic Society of America, Los Carneros Pointe, and Cabrillo Business Park) would be subject to geohazard impacts due to seismically induced ground failure and unstable slopes. Potential ground failure at any of these related project sites due to site-specific and regional geohazards would be less than significant with implementation of proper geotechnical engineering. Due to the localized nature of the impacts, cumulative impacts would not occur. These discretionary projects would be subject to environmental review and appropriate mitigations would be established for each project prior to development. Standard geotechnical investigations and resultant engineered construction designs would address any specific geotechnical constraints that could impair development-related structural stability, ensuring public safety.

With implementation of proper geotechnical engineering, less than significant impacts would occur in association with construction and operation of the proposed project due to potential seismically induced ground failure and potentially unstable slopes. The proposed project's contribution to cumulative effects related to geological resources would result in a less than significant cumulative impact, based on the localized nature of the impacts.

## **Paleontological Resources**

The proposed project, together with other reasonably foreseeable projects identified in Table 4.1 could have a cumulatively significant impact on the remaining paleontological resources in the region. Reasonably foreseeable development would include ground disturbing activities during construction (i.e., clearing, grubbing, grading, and excavation) that could potentially affect paleontological resources. Impacts would be addressed for each discretionary project during plan review, and standard conditions would be applied as necessary to minimize these effects, resulting in a less than significant cumulative impact.

Ground disturbing activities associated with the proposed project could result in significant adverse effects, therefore contributing substantially to cumulative effects on paleontological resources prior to mitigation. However, implementation of **Mitigation Measures GEO-4.1, GEO-4.2, and GEO-4.3** would minimize the project's potential for disturbing paleontological resources. Therefore, the project's contribution to cumulative effects would result in a less than significant cumulative impact.

## **4.2.6 Hazards and Hazardous Materials**

Storage and use of hazardous materials at approved and reasonably foreseeable commercial and industrial project sites in the project vicinity (e.g., Fairview Commercial Center, Dwight Gregory, University Properties,



Los Carneros Pointe, Cabrillo Business Park, and Costco Gas Station), in addition to lower concentrations at residential projects (e.g., Page Hotel, Village at Los Carneros, Hira Mixed Use Project, and Citrus Village), would have the potential to result in a significant cumulative impact.

Compliance with applicable federal, state, and local regulations during project construction and operation would ensure that the use and storage of hazardous materials would be undertaken in a safe and prudent manner. Accidental spills during hazardous material use, however, would result in a significant impact prior to mitigation. Implementation of **Mitigation Measure HAZ-1**, requiring construction contractors to implement a SWPPP and Hazardous Material Business Plan, would minimize the project's contribution to potential releases of hazardous materials due to use of these substances with less than significant residual impacts. The project's contribution to cumulative effects on public health related to public exposure to hazardous materials would result in a less than significant cumulative impact.

## 4.2.7 Hydrology and Water Quality

### **Water Quality**

Numerous approved and reasonably foreseeable projects within the Goleta Slough watershed (e.g., Fairview Commercial Center, Dwight Gregory, University Properties, Islamic Society of America, Los Carneros Pointe, and Cabrillo Business Park) would contribute runoff and pollutants. The pollutant load contribution of these projects could result in cumulatively significant but feasibly mitigated impacts on water quality. The EPA's recently enacted NPDES Phase II stormwater quality regulations have resulted in more stringent review of discretionary projects. The City of Goleta Planning and Environmental Services Department and Santa Barbara County Planning & Development Department would review all related development proposals for consistency with the adopted statutes. Implementation of BMPs associated with probable future related project SWPPPs would reduce cumulative regional impacts on stormwater quality to less than significant.

Accidental spills or leaks of pollutants, such as fuels, lubricants, and hydraulic fluid, during project equipment operation, refueling, or maintenance, have the potential to enter the West Fork and main stem of Glen Annie Creek. Impacts of small spills would be adverse, short-term, and less than significant because small spills are likely to remain within the work area, with little or no material reaching flowing water. In addition, construction at the creek crossings would be during the dry season when creek flow would be low to none. Larger spills that enter either creek could have short-term, significant impacts on water quality prior to mitigation that would contribute substantially to cumulative effects of past, present, and future projects. Implementation of a SWPPP and associated construction BMPs in **Mitigation Measures GEO-2 and HAZ-1** would ensure that project-specific residual impacts on water quality would be less than significant. Therefore, the project's contribution to cumulative effects would result in a less than significant cumulative impact.

### **Water Resources**

Several reasonably foreseeable projects identified in Table 4-1 would primarily be served by the GWD. The County of Santa Barbara Board of Supervisors has determined that service through the GWD does not have the potential to cause or contribute to groundwater basin overdraft due to the GWD's compliance with the Wright Judgment. All probable future related projects requiring a water supply would be provided water by the GWD under similar circumstances.

Water use for project construction would be restricted primarily to dust control. Groundwater within the underlying bedrock formations would not be used for the project; water would be supplied by COMB. Therefore, the project's contribution to cumulative effects would result in a less than significant cumulative impact. In addition, the project's contribution to these probable future related projects would be beneficial, as the proposed pipeline operations would provide a more reliable source of water from Lake Cachuma.

## **Drainage and Flooding**

Numerous approved and reasonably foreseeable projects within the Goleta Slough watershed (e.g., Fairview Commercial Center, Dwight Gregory, University Properties, Islamic Society of America, Los Carneros Pointe, and Cabrillo Business Park) would be subject to County Flood Control District and/or City of Goleta Public Works specifications requiring sufficient retention of runoff to ensure that impacts on existing drainage infrastructure would be addressed. This would include determination of drainage flows during medium and high storm events and the establishment of onsite detention or retention facilities. The cumulative impacts on drainage and flooding within the Goleta Slough watershed would be significant but feasibly mitigated with implementation of onsite detention and retardation infrastructure that would be required for approval of those projects.

Surface runoff would not be increased as a result of the project, as paving would not occur. Therefore, drainage and flooding impacts would be less than significant. Due to a lack of increased paving, the project's contribution to cumulative effects would result in a less than significant cumulative impact.

### **4.2.8 Land Use**

Cumulative development throughout the surrounding City of Goleta and Santa Barbara County areas would incrementally alter the area's semi-rural character and would result in the conversion of undeveloped lands to suburban development. Reasonably foreseeable development of projects in the region would have the potential to introduce incompatible development relative to surrounding existing land uses. Potential incompatibilities between existing open space and reasonably foreseeable development would be resolved on a case-by-case basis through the use of landscape buffers, setbacks, and appropriate architectural design. Reasonably foreseeable development listed in Table 4-1 would not disrupt or divide any existing communities. Potential inconsistencies with plans and policies in the Santa Barbara County Comprehensive Plan associated with cumulative development would be addressed for each discretionary project during plan review, and standard conditions would be applied as necessary to minimize these effects. Thus, cumulative impacts would be less than significant.

The proposed project would not result in incompatibilities with existing land uses, or disrupt or divide any established communities because no communities are located within the project area. An easement would be granted by the adjacent private landowners to COMB in order to allow pipeline construction and operation activities that would permit the conditional use of private property, minimizing impacts on existing land uses. Implementation of resource-specific mitigation measures would ensure project compliance with all plans and policies in the Santa Barbara Comprehensive Plan. Project residual impacts on land use would, therefore, be less than significant and would result in a less than significant cumulative impact.

### **4.2.9 Noise**

Reasonably foreseeable development listed in Table 4-1 would result in intermittent, short-term noise impacts throughout the project vicinity. The duration of these localized impacts would be limited to the construction phases of the individual projects. All construction activities taking place within the region would be subject to the standard measures and conditions regulating construction daily noise levels to ensure consistency with the Santa Barbara County Comprehensive Plan and City of Goleta General Plan Noise Element policies. Buildout and operation of reasonably foreseeable projects would contribute to increased ambient noise levels in the region. Cumulative project operations would increase roadway noise levels, affecting any nearby sensitive receptors. However, roadway noise would be conditioned as necessary by incorporation of noise reduction measures (i.e., sound walls), reducing cumulative impacts on sensitive noise receptors to less than significant.

Noise from construction activities would contribute substantially to cumulative effects of past, present, and future projects prior to mitigation. Routine pipeline maintenance would generate sporadic, short-term sources of noise. Short-term sources of noise generated by routine pipeline maintenance activities would not result in a substantial contribution to ambient noise levels because these sources would be infrequent. Proposed project operations would not generate substantial traffic trips along adjacent roadways, and roadway noise would not increase substantially. The proposed project's incremental short-term construction noise residual impacts would be reduced to less than significant with implementation of **Mitigation Measures NOISE-1.1** through **NOISE-1.3**. Therefore, the proposed project's contribution to cumulative effects would result in a less than significant cumulative impact.

#### 4.2.10 Transportation and Circulation

Increased traffic volumes associated with reasonably foreseeable development listed in Table 4-1 would potentially impact the existing transportation system. Cumulative project traffic would substantially impact V/C ratios and/or LOS within the cumulative transportation area of analysis, and would potentially degrade the LOS at some intersections to unacceptable levels. Reasonably foreseeable development would increase regional daily and peak hour trips, which would add traffic to some roadways that have inadequate design features, creating potential safety problems. These problems would be addressed for individual projects during their approval process and would be mitigated so that cumulative impacts would be less than significant.

Project-related vehicular trips would be minimal and would not affect V/C ratios or existing LOS at any intersections and/or roadway segments within the project vicinity. Construction-related traffic could increase the potential for safety problems to a level that would result in a cumulatively considerable contribution to cumulative impacts. Implementation of **Mitigation Measure TRANS-3** would minimize potential safety impacts associated with transport of construction equipment and materials along inadequate roadway segments so that residual impacts would be less than significant. Therefore, the project's contribution to cumulative traffic impacts would result in a less than significant cumulative impact.

#### 4.2.11 Other Resource Issues

##### ***Agricultural Resources***

Cumulative development throughout the City of Goleta and surrounding Santa Barbara County areas, including those projects identified in Table 4-1, would result in cumulatively significant impacts on agricultural resources. Two of these projects, including the Eagle Canyon Ranch and Ballantyne Single Family Residential projects, would result in the conversion of over 1,000 acres (405 hectares) of agricultural land to residential uses, representing a cumulatively significant impact on existing agricultural resources within Santa Barbara County.

All proposed project alternatives would temporarily displace a small portion of an avocado orchard located near the SPTT. Upon completion of all construction activities, the avocado trees removed during project construction would be replanted. As no agricultural areas would be permanently removed or disrupted, the proposed project's contribution to cumulative effects on agricultural resources would result in a less than significant cumulative impact.

##### ***Mineral Resources***

Reasonably foreseeable projects identified in Table 4-1 would not contribute to cumulatively significant impacts on mineral resources. The primary mineral resource in the cumulative project area consists of gravel mining pits in the foothills; however, no projects identified in Table 4-1 would affect these pits. The proposed project would be located within an area that has not been mapped with respect to the potential for

1 mineral resources, such as Portland cement concrete aggregate or other mineral commodities. Similarly, there  
2 are no oil or gas fields in the vicinity of the project site. Therefore, the project's contribution to cumulative  
3 effects on mineral resources would result in a less than significant cumulative impact.

#### 4 **Public Services**

5 Reasonably foreseeable projects identified in Table 4-1 would result in significant but feasibly mitigated  
6 impacts on fire protection, police protection, and schools in the project area. These impacts would be  
7 mitigated to less than significant through the local permitting and approval process. The proposed project  
8 would not contribute to population growth in the area and would, therefore, not result in impacts on police  
9 protection and schools. While the proposed project would increase the demand for onsite fire protection  
10 services during construction, implementing the proposed Fire Protection Plan requirements (Section 2.3.2)  
11 would minimize potential project impacts on fire protection services. Therefore, the project's contribution to  
12 cumulative effects on public services would result in a less than significant cumulative impact.

#### 13 **Utilities/Service Systems**

14 Reasonably foreseeable projects identified in Table 4-1 would result in increased demands on utilities/service  
15 systems in the project area. These impacts would be mitigated to less than significant through the local  
16 permitting and approval process. The proposed project would not increase wastewater or water demands in  
17 the area. Implementation of the project solid waste reduction measures (Section 2.3.2), requiring recycling of  
18 construction materials, and use of recycled materials during construction, would minimize the project's short-  
19 term construction impacts on solid waste. Therefore, the project's contribution to cumulative effects on  
20 utilities and service systems would result in a less than significant cumulative impact.

#### 21 **Recreation**

22 Reasonably foreseeable projects identified in Table 4-1 would result in an increased demand for recreational  
23 facilities. These demands would be addressed in the permitting and approval process for each project so that  
24 cumulative impacts would be less than significant. The proposed project would not contribute to population  
25 growth in the area, and therefore, would have no impacts on recreation in the vicinity. Thus, the project  
26 would not contribute to cumulative effects on recreation.

#### 27 **Socioeconomics**

28 The cumulative projects would also benefit the Santa Barbara County economy through construction labor  
29 and purchases and in some cases, long-term employment related to ongoing operations. The socioeconomic  
30 impacts of the cumulative projects would be less than significant. The Preferred Alternative would benefit the  
31 local economy, primarily due to construction labor and purchases but also by reducing the risk of pipeline  
32 failure and the related adverse economic effects. The socioeconomic impacts of the Preferred Alternative  
33 would be less than significant, and the Preferred Alternative would result in a less than significant cumulative  
34 impact to socioeconomics.

## 5.0 ENVIRONMENTAL JUSTICE

### 5.1 INTRODUCTION

The environmental justice analysis identifies minority and low-income populations in the project area and determines the potential for the project to cause disproportionate public health and environmental effects on minority and low-income populations. The terms “minority population” and “low-income population” defined below are consistent with federal environmental justice guidance (CEQ 1997), California state law, and the race and ethnicity categories used in the 2000 Census.

The U.S. Council on Environmental Quality (CEQ) (1997) environmental justice guidance defines “minority persons” as “individuals who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black (not of Hispanic origin); or Hispanic” (CEQ, 1997). Hispanic or Latino refers to an ethnicity whereas American Indian, Alaskan Native, Asian, Pacific Islander, and Black/African-American (as well as White or European-American) refer to racial categories. For this analysis, consistent with guidance from CEQ (1997) as well as USEPA (1998, 1999), “minority” refers to people who are Hispanic/Latino of any race, as well as those who are non-Hispanic/Latino of a race other than White or European-American.

Low-income populations are defined as persons living below the poverty level, which is \$18,104 for a family of four in 1999 and varies depending on family size, as reported in the 2000 Census.

The proposed project would provide benefits to the local communities served by the SCC by increasing the reliability of the water supply. As a result, no component of the proposed project would have a disproportionate effect on environmental justice populations (a disproportionate effect is defined as an effect that is predominantly borne, more severe, or of a greater magnitude in areas with environmental justice populations than in other areas).

### 5.2 ENVIRONMENTAL SETTING

The project area is located in the foothills of the Santa Ynez Mountains in Santa Barbara County. Much of the surrounding land is in the Los Padres National Forest, north of the City of Goleta. The closest urban areas to the proposed project are located 2 miles to the south within the City of Goleta. Land uses in the project area include open space, limited amounts of agriculture, water distribution facilities, and an electrical substation (refer to Section 3.8 for details). All of the alternatives addressed in this EIS/EIR have the same start and end locations with minor variations in between. The alternative pipeline routes all traverse an avocado orchard located near the SPTT. The Preferred Alternative and Alternative B would be located approximately 250 feet (76.2 meters) from two farmhouse residences, and the Alternative A alignment is located approximately 500 feet (152.4 meters) from these residences. Both residences are rental units that are not currently inhabited by minority persons. The Preferred Alternative and Alternative B alignments are located adjacent to a citrus orchard; the Alternative A route is located approximately 650 feet (198.1 meters) north of that orchard.

### 5.3 REGULATORY SETTING

#### 5.3.1 Federal

EO 12898 requires federal agencies to address environmental justice issues affecting minority and low-income populations, using all the statutory and regulatory authorities that already exist. Executive Order

12898 created an Interagency Work Group on Environmental Justice. It also directed federal agencies to take several specific steps, including to make achieving environment justice part of their mission; to develop an agency wide environmental justice strategy; to not exclude populations from participation in programs and activities or deny benefits or subject populations to discrimination based on race, color or national origin; to attempt to address multiple and cumulative exposures in research; to collect and disseminate information assessing disproportionately high and adverse human health and environmental effects on minority and low income populations; and to promote public participation in decision-making and access to information.

The CEQ's *Environmental Justice Guidance Under NEPA* (CEQ 1997) provides an overview of EO 12898; summarizes its relationship to NEPA; recommends methods for the integration of environmental justice into NEPA compliance; and incorporates definitions, established by the Interagency Work Group on Environmental Justice, of key terms and concepts contained in EO 12898. CEQ guidance identifies minority populations where the percent minority is greater than 50 percent, or "meaningfully greater" than that of the general population (usually the next larger geographic unit relevant for a specific impact with a specific geographic scope; for this analysis, the general population is usually Los Angeles County). "Meaningfully greater" is not defined in CEQ (1997) guidance; for this analysis, "meaningfully greater" is interpreted to mean simply "greater," which provides for a conservative analysis. CEQ guidance identifies low-income populations where the percent low-income is meaningfully greater than the general population.

### 5.3.2 State

California Government Code Section 65040.12 defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws and policies. While there is no requirement under CEQA to address environmental justice, a handful of state legislation has been signed into law since 1999. Legislative and executive actions relating to environmental justice in California have largely been procedural, including, but not limited to, formation of environmental justice advisory committees and assigning coordinating roles and responsibilities to the Governor's Office of Planning and Research and the California Environmental Protection Agency.

## 5.4 IMPACTS AND MITIGATION

### 5.4.1 Methodology

The direct effects of noise, air emissions, and hazardous materials on minority people, as well as the indirect effects associated with construction disturbances within the avocado orchard that could change employment of minorities, are evaluated in this section.

### 5.4.2 Significance Criteria

If any project activities could result in substantial adverse effects on minorities, impacts would be significant.

### 5.4.3 Preferred Alternative

Construction activities would remove a portion of the avocado orchard, and this could have a minor effect on the number of minority workers employed to tend the orchard during pipeline construction. However, subsequent to construction, the orchard would be replanted and would provide the same level of employment as before construction. As described in Sections 3.2 Air Quality, 3.6 Hazardous Materials, and 3.9 Noise, no significant impacts on minority or low-income persons would occur as a result of proposed construction and operation activities. Implementation of **Mitigation Measures NOISE-1.1** through **NOISE 1.3** would ensure

that impacts on the adjacent ranch residences located at least 250 feet (76 meters) from the pipeline route would be minimized during construction. Therefore, the Preferred Alternative would not result in disproportionately high and adverse effects on minority and low-income populations, and impacts would be less than significant.

#### *Mitigation Measures*

As impacts on minority and low-income populations would be less than significant, no mitigation is required.

#### *Residual Impacts*

Residual impacts would be less than significant.

### **5.4.4 Alternative A (Parallel Pipeline)**

Effects of construction through the avocado orchard would be the same as described for the Preferred Alternative. The Alternative A alignment would be located at least 250 feet (76 meters) further away from the ranch residences compared to the Preferred Alternative, and impacts on surrounding sensitive noise receptors would be minimized during construction with implementation of **Mitigation Measures NOISE-1.1** through **NOISE 1.3**. No impacts that would substantially affect minority or low-income persons would occur under this alternative. Therefore, Alternative A would not result in disproportionately high and adverse effects on minority and low-income populations, and impacts would be less than significant.

#### *Mitigation Measures*

As impacts on minority and low-income populations would be less than significant, no mitigation is required.

#### *Residual Impacts*

The residual impact would be *less than significant*.

### **5.4.5 Alternative B (Non-Parallel Pipeline)**

Effects of construction through the avocado orchard would be the same as described for the Preferred Alternative. As the Alternative B alignment would be the same distance (250 feet, 76 meters) from the ranch residences as the Preferred Alternative, implementation of **Mitigation Measures NOISE-1.1** through **NOISE 1.3** would ensure that impacts on the adjacent ranch residences would be minimized during construction. No impacts that would substantially affect minority or low-income persons would occur under this alternative. Therefore, Alternative B would not result in disproportionately high and adverse effects on minority and low-income populations, and impacts would be *less than significant*.

#### *Mitigation Measures*

As impacts would be less than significant, no mitigation is required.

#### *Residual Impacts*

The residual impact would be *less than significant*.

### **5.4.6 No Project Alternative**

The No Project Alternative would include construction of site improvements, regular (annual) maintenance, and operational activities that could occur with issuance of federal permits for creek crossings. Construction activities under the No Project Alternative would consist of replacing the SPTT, the Glen Anne and Corona Del Mar turnout structures, and the Glen Anne meter, as well as substantial improvements to or replacement of all stream crossings due to downstream degradation. Similar to the Preferred Alternative, impacts on surrounding sensitive noise receptors would be minimized during construction with implementation of **Mitigation Measures NOISE-1.1** through **NOISE 1.3**. No impacts that would substantially affect minority or low-income persons would occur under this alternative. Therefore, the No Project Alternative would not result in disproportionately high and adverse effects on minority and low-income populations, and impacts would be *less than significant*.

#### **Mitigation Measures**

As impacts would be less than significant, no mitigation is required.

#### **Residual Impacts**

The residual impact would be *less than significant*.

### **5.4.6 No Action Alternative**

Under the No Action Alternative, regular maintenance would continue as in the past, but no site improvements would be made. As a result, the SPTT or the pipeline at one of the creek crossings could fail with release of a large volume of water and extensive erosion downslope of the release. Damage to the avocado orchard near the SPTT or the lemon orchard adjacent to the main stem of Glen Annie Creek could affect jobs for minority workers that tend these orchards. Repair of the failed structures and erosion would result in temporary noise from equipment. Because the work would be done under emergency circumstances, noise mitigation likely would not be implemented. Normal operations and maintenance would have *no impact* on minority and low-income populations. Emergency repairs would not substantially affect minority or low-income persons; therefore the No Action Alternative would not result in disproportionately high and adverse effects on minority and low-income populations, and impacts would be *less than significant*.

#### **Mitigation Measures**

As impacts would be less than significant, no mitigation is required.

#### **Residual Impacts**

The residual impact would be *less than significant*.



## 6.0 ALTERNATIVES COMPARISON

### 6.1 INTRODUCTION

This chapter presents a comparison of the proposed project to the alternatives. Various alternatives were considered during preparation of this Draft EIS/EIR. Under NEPA, an EIS must devote “substantial treatment” to each alternative considered in detail, including the proposed action, so that reviewers may evaluate their comparative merits (40 CFR 1502.14[b]). CEQA requires that an EIR present a range of reasonable alternatives to the proposed project. Accordingly, five alternatives, including the proposed project (i.e., Preferred Alternative), have been analyzed co-equally in this Draft EIS/EIR to provide sufficient information about the environmental effects of each alternative, such that informed decision-making can occur. The five alternatives evaluated in detail in Chapter 3 are described in Section 2.5 and include:

- Preferred Alternative;
- Alternative A – Parallel Pipeline;
- Alternative B – Non-Parallel Pipeline; and
- No Project Alternative
- No Action Alternative.

### 6.2 REQUIREMENTS TO EVALUATE ALTERNATIVES

NEPA (40 CFR 1502.14[a]) and CEQA Guidelines (15126.6) require that an EIS and an EIR examine alternatives to a project in order to explore a reasonable range of alternatives that meet most of the basic project objectives, while reducing the severity of potentially significant environmental impacts. This EIS/EIR compares the merits of the alternatives and determines an environmentally superior alternative.

#### 6.2.1 NEPA Requirements

According to the CEQ NEPA Regulations (40 CFR 1502.14), the alternatives section of an EIS is required to:

- Rigorously explore and objectively evaluate all reasonable alternatives;
- Include reasonable alternatives not within the lead agency’s jurisdiction or congressional mandate, if applicable;
- Include a no-action alternative;
- Develop substantial treatment of each alternative, including the proposed action, so that reviewers can evaluate their comparative merits;
- Identify the lead agency’s preferred alternative; and
- Include appropriate mitigation measures (when not already part of the proposed action or alternatives).

## 6.2.2 CEQA Requirements

CEQA Guidelines Section 15126.6(b) stipulates that an EIR alternatives analysis is required to:

- Focus on alternatives to the project or its location which are capable of avoiding or substantially reducing any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly;
- Identify an “environmentally superior” alternative to the proposed project; and
- Include analysis of the “No Project” Alternative, assuming the reasonable future use of the project parcel if the application was not approved. If the environmentally superior alternative is the No Project Alternative, the EIR must identify an additional “environmentally superior” choice among the other project alternatives.

CEQA Guidelines Section 15126.6(a) states:

*An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.*

The alternatives were also assessed in accordance with CEQA Guidelines Section 15126.6(f), which states:

*The range of alternatives required in an EIR is governed by a “rule of reason” that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to one that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project.*

## 6.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table 6-1 illustrates the associated environmental impacts of the proposed project relative to the five alternatives listed above. The categories of impacts are represented by one of the following for purposes of comparing the impacts of the proposed project (i.e., Preferred Alternative) to the four project alternatives:

- I. Significant environmental impacts which may require mitigation measures, but those measures cannot reduce impacts to a level below significance. These impacts are characterized as “*significant and unavoidable*” in the EIS/EIR text.
- II. Significant environmental impacts that can be fully mitigated to a level below significance. These impacts are characterized as “*significant but feasibly mitigated*” in the EIS/EIR text.
- III. Potential effects that were found not to be significant, with no mitigation required. These impacts are characterized as “*less than significant*” in the EIS/EIR text.
- IV. No potential effects were found. These impacts are characterized as “*no impact*” in the EIS/EIR text.

Adverse impacts reduced relative to the Preferred Alternative are indicated by (-); increased adverse impacts relative to the proposed project are indicated by (+); and similar impacts are indicated by (=).

The *No Project Alternative*, by virtue of the absence of substantial development, would be environmentally superior to all other alternatives. As required by CEQA Guidelines Section 15126, another alternative that is most capable of reducing significant project impacts must then be identified.

The *Preferred Alternative* pipeline alignment would be located adjacent (parallel) to the existing SCC pipeline along portions of existing easements and south of the existing SCC pipeline from approximately Station 60+00 to the east end of Glen Annie Reservoir and from east of Glen Annie Creek to the Corona Del Mar turnout. Construction of the Preferred Alternative would meet the overall project objectives under NEPA and CEQA associated with increasing operational flexibility, reliability, and the conveyance capacity of the SCC between the SPTT and the CDMWTP with the fewest overall environmental impacts when compared to the other alternatives. Therefore, the Preferred Alternative is considered the environmentally superior alternative.

The *Alternative A (Parallel)* pipeline would be constructed adjacent to the existing pipeline alignment. Buildout under this alternative would minimize significant impacts on biological resources (i.e., oak woodland habitat) to the extent feasible. However, construction of the central portion of the Alternative A alignment parallel to the existing pipeline across hilly terrain would increase the exposure of highly erodible soils to substantial erosion. The exacerbated geological impacts make this alternative environmentally inferior.

The *Alternative B (Non-Parallel)* pipeline alignment would include portions along the existing pipeline easements; however, this alignment would generally be constructed southwest or north of the existing pipeline. Construction of this alignment would reduce impacts on paleontological resources to the greatest extent feasible, but would increase impacts on biological resources, geology and soils, and hydrology/water quality. Therefore, this alternative would not be environmentally superior.

The *No Action Alternative* would include no site improvements, but regular (annual) maintenance and operational activities would continue to occur as in the past. The poor condition of the concrete in the SPTT due to hydrogen sulfide gas within the water would ultimately cause this structure to fail. Failure would result in increased impacts on biological resources, cultural resources, geological resources, and hydrology and water quality. The increased impacts resulting from structure failure make this alternative environmentally inferior.

**Table 6-1. Impact Comparison of Alternatives to the Proposed Project**

Type of Impact	MAGNITUDE OF IMPACT IN COMPARISON TO PROPOSED PROJECT				
	<i>Preferred Alternative</i>	<i>Alternative A</i>	<i>Alternative B</i>	<i>No Project Alternative</i>	<i>No Action Alternative</i>
<b>AESTHETIC/VISUAL RESOURCES</b>					
<b>AES-1:</b> Change existing scenic vistas during construction or operation.	III	III (=)	III (=)	III (-)	III (-)
<b>AES-2:</b> Degrade existing visual character or quality of the site and its surroundings through the processes of grading and vegetation clearing.	II	II (=)	II (=)	III (-)	III (-)
<b>AES-3:</b> Create substantial sources of light or glare.	III	III (=)	III (=)	III (-)	III (-)
<b>AIR QUALITY</b>					
<b>AQ-1:</b> Conflict with or obstruct implementation of an applicable air quality plan.	III	III (=)	III (=)	III (-)	III (-)
<b>Key:</b> + More adverse impacts than proposed project = Similar to proposed project - Fewer adverse impacts than proposed project					

**Table 6-1. Impact Comparison of Alternatives to the Proposed Project (continued)**

Type of Impact	MAGNITUDE OF IMPACT IN COMPARISON TO PROPOSED PROJECT				
	Preferred Alternative	Alternative A	Alternative B	No Project Alternative	No Action Alternative
<b>AIR QUALITY (CONTINUED)</b>					
<b>AQ-2:</b> Exceed any ambient air quality standard or contribute substantially to an existing or projected air quality standard violation.	III	III (+)	III (+)	III (-)	III (-)
<b>AQ-3:</b> Result in a net increase of any criteria pollutant for which the project region is in nonattainment.	III	III (+)	III (+)	III (-)	III (-)
<b>AQ-4:</b> Expose sensitive receptors to substantial pollutant concentrations.	III	III (=)	III (=)	III (-)	III (-)
<b>AQ-5:</b> Create objectionable odors that affect a substantial number of people.	III	III (=)	III (=)	III (-)	III (-)
<b>BIOLOGICAL RESOURCES</b>					
<b>BIO-1:</b> Result in the loss of individuals or habitat for special status plants and wildlife.	II	II (+)	II (-)	II (-)	I (+)
<b>BIO-2:</b> Result in a temporary loss of riparian woodland, oak woodland, and seasonal wetlands.	I	I (-)	I (+)	I (-)	I (+)
<b>BIO-3:</b> Adversely affect wildlife migration or breeding habitat for migratory birds and wildlife.	II	II (=)	II (=)	III (-)	I (+)
<b>BIO-4a:</b> Disrupt local plant or wildlife communities.	III	III (+)	III (-)	III (-)	I (+)
<b>BIO-4b:</b> Disrupt local plant communities through the introduction or spread of invasive species.	II	II (=)	II (=)	III (-)	I (+)
<b>BIO-4c:</b> Disrupt local aquatic communities through the introduction or spread of non-native species.	III	III (=)	III (=)	III (-)	I (+)
<b>BIO-5:</b> Removal of oak trees.	II	II (-)	II (+)	III (-)	I (+)
<b>CULTURAL RESOURCES</b>					
<b>CR-1:</b> Result in the disturbance of a resource listed in or eligible for listing in the NRHP, the CRHR, or otherwise considered a unique or important archaeological resource under CEQA.	II	II (=)	II (-)	III (-)	I (+)
<b>GEOLOGY AND SOILS</b>					
<b>GEO-1:</b> Potential for construction to alter the topography beyond that resulting from natural erosion and depositional processes.	III	III (=)	I (+)	III (-)	I (+)
<b>GEO-2:</b> Potential for construction to trigger or accelerate substantial erosion.	II	II (+)	II (+)	II (-)	II (-)
<b>GEO-3:</b> Potential for construction to trigger or accelerate shallow landslides.	III	III (+)	III (-)	III (-)	III (-)
<b>GEO-4:</b> Result in the disturbance of paleontological resources of unusual scientific value.	II	II (=)	II (=)	III (-)	I (+)
<b>GEO-5:</b> Potential for ground rupture due to an earthquake to cause damage to structures during operations.	III	III (=)	III (=)	III (=)	III (=)
<b>GEO-6:</b> Damage resulting from earthquake-induced ground shaking during operations.	III	III (=)	III (=)	III (=)	III (=)
<b>GEO-7:</b> Exposure of people or property to a greater than average risk of tsunamis or seiches.	IV	IV (=)	IV (=)	IV (=)	IV (=)
<b>HAZARDS AND HAZARDOUS MATERIALS</b>					
<b>HAZ-1:</b> Create a hazard through the routine transport, use, or disposal of hazardous materials upset and accident involving the release of hazardous material into the environment.	II	II (=)	II (=)	II (-)	II (-)
<b>HAZ-2:</b> Create hazard through upset and accident conditions associated with operations and/or maintenance.	III	III (=)	III (=)	III (=)	III (=)
<b>HAZ-3:</b> Create a hazard due to the presence of soil or groundwater contamination.	III	III (=)	III (=)	III (-)	III (-)
<b>Key:</b> + More adverse impacts than proposed project = Similar to proposed project - Fewer adverse impacts than proposed project					

**Table 6-1. Impact Comparison of Alternatives to the Proposed Project (continued)**

<i>Type of Impact</i>	MAGNITUDE OF IMPACT IN COMPARISON TO PROPOSED PROJECT				
	<i>Preferred Alternative</i>	<i>Alternative A</i>	<i>Alternative B</i>	<i>No Project Alternative</i>	<i>No Action Alternative</i>
<b>HYDROLOGY AND WATER QUALITY</b>					
<b>HYDRO/WQ-1:</b> Violate water quality standards.	II	II (=)	II (+)	II (-)	I (+)
<b>HYDRO/WQ-2:</b> Deplete groundwater supplies or interfere with groundwater recharge or flow.	III	III (=)	III (=)	III (-)	III (-)
<b>HYDRO/WQ-3:</b> Alter the existing drainage pattern of the site or area or increase the rate or amount of surface runoff.	III	III (=)	III (=)	III (-)	II (+)
<b>LAND USE</b>					
<b>LU-1:</b> Result in incompatibilities with existing land uses.	III	III (-)	III (+)	III (-)	III (-)
<b>LU-2:</b> Disrupt or divide any established communities.	IV	IV (=)	IV (=)	IV (=)	IV (=)
<b>LU-3:</b> Result in inconsistencies with land use and conservation plans and policies contained in the Santa Barbara County Comprehensive Plan.	III	III (=)	III (=)	III (-)	III (-)
<b>NOISE</b>					
<b>NOISE-1:</b> Short-term increases in existing ambient noise levels during construction activities.	II	II (=)	II (=)	II (-)	II (-)
<b>NOISE-2:</b> Generate long-term exterior or interior noise levels that would affect sensitive receptors during operations.	III	III (=)	III (=)	III (=)	III (=)
<b>NOISE-3:</b> Increase ambient noise levels of adjacent areas during operations.	III	III (=)	III (=)	III (=)	III (=)
<b>TRANSPORTATION/CIRCULATION</b>					
<b>TRANS-1.1:</b> Increase intersection v/c ratios within the project vicinity during construction activities.	III	III (=)	III (=)	III (-)	III (-)
<b>TRANS-1.2:</b> Increase intersection v/c ratios within the project vicinity during operations.	III	III (=)	III (=)	III (-)	III (-)
<b>TRANS-2:</b> Generate additional vehicular trips that would adversely affect intersection capacities in the project vicinity.	III	III (=)	III (=)	III (-)	III (-)
<b>TRANS-3:</b> Increase traffic on a roadway that could result in a potential safety problem due to existing design features.	II	II (=)	II (=)	II (-)	II (-)
<b>Key:</b> + More adverse impacts than proposed project = Similar to proposed project - Fewer adverse impacts than proposed project					

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## 7.0 OTHER REQUIRED SECTIONS

### 7.1 UNAVOIDABLE SIGNIFICANT IMPACTS

Proposed project development would result in significant, unavoidable impacts on the following resources:

**Biological Resources:** Project construction would result in the removal of 3.36 acres (1.36 ha) of coast live oak woodland. After mitigation, including replanting oak trees, it can take several to many decades for coast live oaks to mature and provide the habitat characteristics of oak woodland. In addition, young trees do not have the diversity of micro habitats that make these communities so valuable to wildlife. Therefore, as the removal of coast live oak woodland would not be immediately remedied through mitigation, impacts would be significant and unavoidable.

### 7.2 SIGNIFICANT IRREVERSIBLE IMPACTS

#### 7.2.1 Introduction

Pursuant to Section 15126.2(c) of the State CEQA Guidelines, an EIR must consider any significant irreversible environmental changes that would be caused by the project should it be implemented. Section 15126.2(c) states:

*Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impact and, particularly, secondary impacts (such as highway improvements which provide access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.*

#### 7.2.2. Analysis of Irreversible Changes

The project would require the use of non-renewable resources, such as metal alloys and aggregate resources, for the physical construction of the water supply pipeline. However, the project does not represent an uncommon construction project that uses an extraordinary amount of raw materials in comparison to other infrastructure/maintenance projects of similar scope and magnitude.

The project would construct a water supply pipeline with appurtenant facilities. Resources that are committed irreversibly and irretrievably are those that would be used by a project on a long-term or permanent basis. Resources committed to this project include fossil fuels, capital, labor, and construction materials such as rock, concrete, steel, gravel, and soils.

Fossil fuels and energy would be consumed in the form of diesel, oil, and gasoline used for equipment and vehicles during construction and operation activities. During operations, diesel, oil, and gasoline would be used during routine pipeline maintenance. These fossil fuel resources would be irretrievable and irreversible.

Non-recoverable materials and energy would be used during construction and operations, but the amounts needed would be easily accommodated by existing supplies. Although the increase in the amount of materials and energy used would be insignificant, they would nevertheless be unavailable for other uses.

CEQA Section 15126.2(c) requires that an EIR evaluate the irretrievable commitments of resources to assure that current consumption is justified. The irretrievable commitment of resources required by the proposed project is justified by the objectives of the project, which are to replace deteriorated water infrastructure with adequate structures to accommodate regional water needs and improve the level of service and operability; provide a second pipeline to convey Cachuma Project water or SWP water to the South Coast if the Upper Reach of the SCC is out of service due to scheduled and/or unexpected repairs; and increase operational flexibility by providing higher flow rates to accommodate regional water needs during times of peak demand.

## **7.3 GROWTH INDUCEMENT**

### **7.3.1 Introduction**

The State of California CEQA Guidelines require an EIR to discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. This includes ways in which the proposed project would remove obstacles to population growth or trigger the construction of new community services facilities that could cause significant effects (State CEQA Guidelines, Section 15126.2).

NEPA requires an EIS to examine the potential of a project to significantly or adversely affect the environment as a result of direct or indirect effects. Indirect effects (NEPA, 40 CFR 1508.8[b]) may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air, water, and other natural systems including ecosystems. The analysis presented below focuses on whether the project would directly or indirectly stimulate significant economic or population growth in the surrounding area.

### **7.3.2 Summary of Growth-Inducing Impacts**

As discussed below, the project would not have a growth-inducing impact on surrounding areas. Although the project would construct a new water supply pipeline to serve the CDMWTP, this would not stimulate significant economic or population growth, remove obstacles to population growth, or necessitate the construction of new community facilities that would lead to additional growth in the surrounding area.

#### **7.3.2.1 Direct Growth-Inducing Impacts**

A project would directly induce growth if it would remove barriers to population growth (e.g., by proposing new homes and businesses). The proposed project would construct a second 48-inch diameter water supply pipeline with appurtenant facilities. This type of project is not anticipated to trigger new residential development in the project area for the following reasons: (1) the project does not include the development of new housing or population-generating uses; and (2) the project would not significantly affect the economy of the region in ways that would generate significant direct growth-inducing impacts.

The direct effects of a project on regional growth generally stem from economic growth resulting from labor needs and expenditures. This project would result in the generation of up to 18 new, short-term jobs during construction activities, but would not generate any new jobs during operations. The short-term construction effects would include expenditures that would result in the employment of people primarily from the local region. There would be no long-term operational effects as the project would not result in new employment opportunities. Therefore, the project would not be expected to stimulate substantial growth in the retail sector or contribute significantly to employment within the region.

Construction activities would occur over an approximate 11-month period. The short-term construction employees would likely be accommodated by the existing labor pool within the greater Santa Barbara County



1 area. Because of the existing sizable local and regional labor pool, no significant influx of workers into the  
2 local community is anticipated. Thus, due to the minimal number of employees and the existing supply for  
3 workers in the local community, any increase in population and housing as a result of construction of the  
4 proposed project would be less than significant.

5 Therefore, because the project: (1) would not involve the development of new housing; and (2) would not  
6 significantly affect the economy of the region, the project would not generate significant direct growth-  
7 inducing impacts.

### 8 **7.3.2.2 Indirect Growth-Inducing Impacts**

9 A project would indirectly induce growth if it would trigger the construction of new community service  
10 facilities that could increase the capacity of infrastructure in an area that currently meets the demands (e.g., an  
11 increase in the capacity of a sewer treatment plant or the construction or widening of a roadway beyond that  
12 which is needed to meet existing demand).

13 The purpose of the project is to increase the operational flexibility, reliability, and conveyance capacity of the  
14 SCC between the SPTT and the CDMWTP to accommodate peak demand levels and to allow maintenance of  
15 the pipeline. Operational flexibility would increase due to the ability to provide higher flow rates (up to the  
16 65-MGD tunnel capacity) to CDMWTP; however, this would not remove an existing obstacle to future  
17 growth. Currently, the Upper Reach of the SCC has the largest demand deficit and is located upstream from  
18 the sources of demand. As limitations and age of the original equipment, significant system modifications,  
19 and increased demands constrain the ability of the SCC to function at the system's original design capacity,  
20 COMB is forced to rely on water stored in Lauro, Ortega, and Carpinteria reservoirs to meet regional water  
21 needs. The proposed project would allow more water flow farther along the pipeline to improve the level of  
22 service and reliability, thereby removing the reliance on these other water sources. The proposed  
23 improvements would allow more water flow farther along the pipeline, which would originate from one  
24 source (i.e., Lake Cachuma) rather than multiple downstream sources. The total amount of water delivered  
25 per year, however, would not increase. As the total amount of water delivered per year would not increase,  
26 the potential for growth inducement resulting from construction and operation of the proposed project would  
27 be less than significant.

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## 8.0 ACRONYMS

1	AC	Agricultural Commercial
2	AG-II-100	Agricultural, 100-acre minimum parcel size
3	AIRFA	American Indian Religious Freedom Act of 1978
4	APCD	Air Pollution Control District
5	ARB	California Air Resources Board
6	BMPs	Best Management Practices
7	CAA	Federal Clean Air Act
8	CAAQS	California Ambient Air Quality standards
9	CAP	Clean Air Plan
10	CBC	California Building Code
11	CCAA	California Clean Air Act of 1988
12	CCC	California Coastal Commission
13	CCR	California Code of Regulations
14	CDFG	California Department of Fish and Game
15	CDMG	California Division of Mines and Geology
16	CDMWTP	Corona Del Mar Water Treatment Plan
17	CEQ	U.S. Council on Environmental Quality
18	CEQA	California Environmental Quality Act
19	CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
20	CFR	Code of Federal Regulations
21	cm	centimeter
22	CMP	Congestion Management Plan
23	CNDDDB	California Native Diversity Database
24	CNEL	Community Noise Equivalent Level
25	CNPS	California Native Plant Society
26	CO	carbon monoxide
27	COMB	Operations and Maintenance Board
28	CPP	concrete pressure pipe
29	CRHR	California Register of Historic Resources
30	CSC	California Species of Special Concern
31	CWA	Clean Water Act
32	cy	cubic yards
33	dB	decibels
34	dBA	A-weighted decibel
35	DBH	diameter at breast height
36	DIP	ductile iron pipe
37	EIR	Environmental Impact Report
38	EIS	Environmental Impact Statement
39	EO	Executive Order
40	EPA	U.S. Environmental Protection Agency
41	ESA	Endangered Species Act
42	ESHA	Environmentally Sensitive Habitat Area
43	g	measure of percent of gravity
44	GWC	Goleta West Conduit
45	GWD	Goleta Water District
46	ha	hectare
47	HAPs	hazardous air pollutants
48	HGL	hydraulic grade line
49	LCP	Santa Barbara County's Local Coastal Plan
50	L <sub>DN</sub>	Day-night average sound levels

1	LEQ	Equivalent sound level
2	LOS	Level of Service
3	LOS	Level of Service
4	$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
5	MBTA	Migratory Bird Treaty Act
6	MGD	million gallons per day
7	MS4	municipal separate storm sewer system
8	NAAQS	National Ambient Air Quality Standards
9	NAGPRA	Native American Graves Protection and Repatriation Act of 1990
10	NEPA	National Environmental Policy Act
11	NMFS	National Marine Fisheries Service
12	NO <sub>2</sub>	nitrogen dioxide
13	NO <sub>x</sub>	oxides of nitrogen
14	NPDES	National Pollutant Discharge Elimination System
15	NRHP	National Register of Historic Places
16	O <sub>3</sub>	ozone
17	P&D	Santa Barbara County Planning and Development
18	Pb	lead
19	PM <sub>10</sub>	particulate matter less than 10 microns in diameter
20	PM <sub>2.5</sub>	particulate matter less than 2.5 microns in diameter
21	ppm	parts per million
22	PRC	Public Resources Code
23	Project	South Coast Conduit/Upper Reach Reliability Project
24	RCRA	Resource Conservation and Recovery Act
25	Reclamation	U.S. Bureau of Reclamation
26	ROCs	reactive organic compounds
27	ROGs	reactive organic gases
28	RWQCB	Regional Water Quality Control Board
29	SBCAG	Santa Barbara County Association of Governments
30	SBCAPCD	Santa Barbara County Air Pollution Control District
31	SCC	South Coast Conduit
32	SCCPS	South Coast Conduit pump station
33	SIP	State Implementation Plan
34	SO <sub>2</sub>	sulfur dioxide
35	SPCC	Spill Prevention, Control, and Countermeasure
36	SPTT	South Portal of the Tecolote Tunnel
37	SVP	Society of Vertebrate Paleontologists
38	SWP	State Water Project
39	SWPPP	Stormwater Pollution Prevention Plan
40	SWRCB	State Water Resources Control Board
41	TACs	toxic air contaminants
42	TDH	total dynamic head
43	TDS	Total dissolved solid
44	UBC	Uniform Building Code
45	USACE	United States Army Corps of Engineers
46	USFWS	U.S. Fish and Wildlife Service
47	V/C	volume to capacity
48	VOCs	volatile organic compounds
49	WSP	welded steel pipe
50	YBP	years before present

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- 10 Lisbeth Springer, Socioeconomics
- 11 Karen Quinkert and Greg Wadsworth, Document Processing
- 12 Joe Walsh, GIS

### 13 **CACHUMA OPERATION AND MAINTENANCE BOARD (COMB)**

- 14 Brett Gray, Project Manager

### 15 **BUREAU OF RECLAMATION**

- 16 Laura Myers, Resources Management Division Chief
- 17 Michael Kinsey, Supervisory Wildlife Biologist
- 18 Judi Tapia, Natural Resources Specialist

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## ***Appendix A***

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Notice of Preparation (NOP)

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# NOTICE OF PREPARATION

**TO:** Responsible Agencies and Interested Parties  
**FROM:** Cachuma Operation and Maintenance Board  
**SUBJECT:** Notice of Preparation of a Draft Environmental Impact Statement/Environmental Impact Report

**Lead Agencies:**

Agency name:	<u>Bureau of Reclamation</u>	Cachuma Operation and <u>Maintenance Board (COMB)</u>
Street Address:	<u>1243 N Street</u>	<u>3301 Laurel Canyon Road</u>
City/State/Zip:	<u>Fresno, CA 93721</u>	<u>Santa Barbara, CA 93105-2017</u>
Contact:	<u>Laura Myers</u>	<u>Brett Gray</u>

**PROJECT:** South Coast Conduit/Upper Reach Reliability Project (Secondary Pipeline Project)

The Bureau of Reclamation and COMB will be the joint Lead Agencies and will prepare a joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the project identified below. We need to know the views of your agency as to the scope and content of the information that is germane to your statutory responsibilities or other interest in connection with the proposed project. Agencies will need to use the EIS/EIR prepared by the Bureau of Reclamation and COMB, if applicable, when considering any permits or other approvals of the project that they may be required or authorized to issue. Comments should be provided on this NOP in order to give the lead agencies the opportunity to effectively consider your comments during preparation of the EIS/EIR.

The project description, location, and the potential environmental effects are provided in the attached materials.

Due to the time limits mandated by state law, your response to this NOP must be received at the earliest possible date but *not later than June 17, 2007*. Please respond to:

Cachuma Operation & Maintenance Board  
c/o Science Applications International Corporation  
Attention: Rosie Thompson  
5464 Carpinteria Avenue, Suite K  
Carpinteria, CA 93013  
(805) 566-6400

## **PROJECT PURPOSE**

The purpose of the project is to increase the operational flexibility, reliability, and capacity of the South Coast Conduit (SCC) between the South Portal of the Tecolote Tunnel (SPTT) and the Corona Del Mar Water Treatment Plan (CDMWTP). The increase in operational flexibility, reliability, and capacity are intended to accommodate peak demand levels and to allow maintenance of the pipeline. The limitations and age of the original equipment, significant system modifications, and increased demands constrain the ability of the SCC to function at the system's original design capacity. Because of these limitations, COMB is forced to rely on water stored in Lauro, Ortega, and Carpinteria reservoirs to meet regional water needs. In addition, no redundant supply or pipeline exists to convey Cachuma Project water or State Water Project (SWP) water to the South Coast if the Tecolote Tunnel or the Upper Reach of the SCC is out of service, due to scheduled and/or unexpected repairs. As the Upper Reach of the SCC has the largest demand deficit and is located upstream from the sources of demand, the proposed improvements would allow more water flow farther along the pipeline to improve the level of service and reliability.

## **PROJECT LOCATION**

The project site is located in Glen Annie Canyon, north of the City of Goleta, in Santa Barbara County, California. The project site encompasses the area surrounding the existing SCC between the SPTT and the CDMWTP (see Figure 1).

## **PROJECT DESCRIPTION**

The SCC and the Tecolote Tunnel were constructed in the 1950's by Reclamation as part of the Cachuma Project. The Cachuma Project provides for the storage of surface water from the Santa Ynez River watershed and a terminal point for SWP water at Lake Cachuma for the following South Coast communities: Goleta, Santa Barbara, Montecito, Summerland, and Carpinteria.

The SCC water distribution system transports approximately 80% of the South Coast's water supply and provides municipal, industrial, and irrigation water to the Goleta Water District, City of Santa Barbara, Montecito Water District, and Carpinteria Valley Water District. Reclamation owns all SCC facilities; COMB manages the facilities under a Transfer of Operations and Maintenance (O&M) Contract with Reclamation.

The project would construct a second water supply pipeline with appurtenant facilities. The existing SCC pipeline would remain operational; abandonment and demolition of the existing pipeline would not occur. Two alternative alignments are being proposed under the current application. Both alignments would increase reliability and provide COMB the ability to perform regularly scheduled inspections and maintenance to one pipeline while the second is operational. Operational flexibility would increase due to the ability to provide higher flowrates (up to 65 MGD tunnel capacity) to CDMWTP and increased flowrates to facilities downstream of the CDMWTP during times of peak demands. The total amount of water delivered per year, however, would not increase.



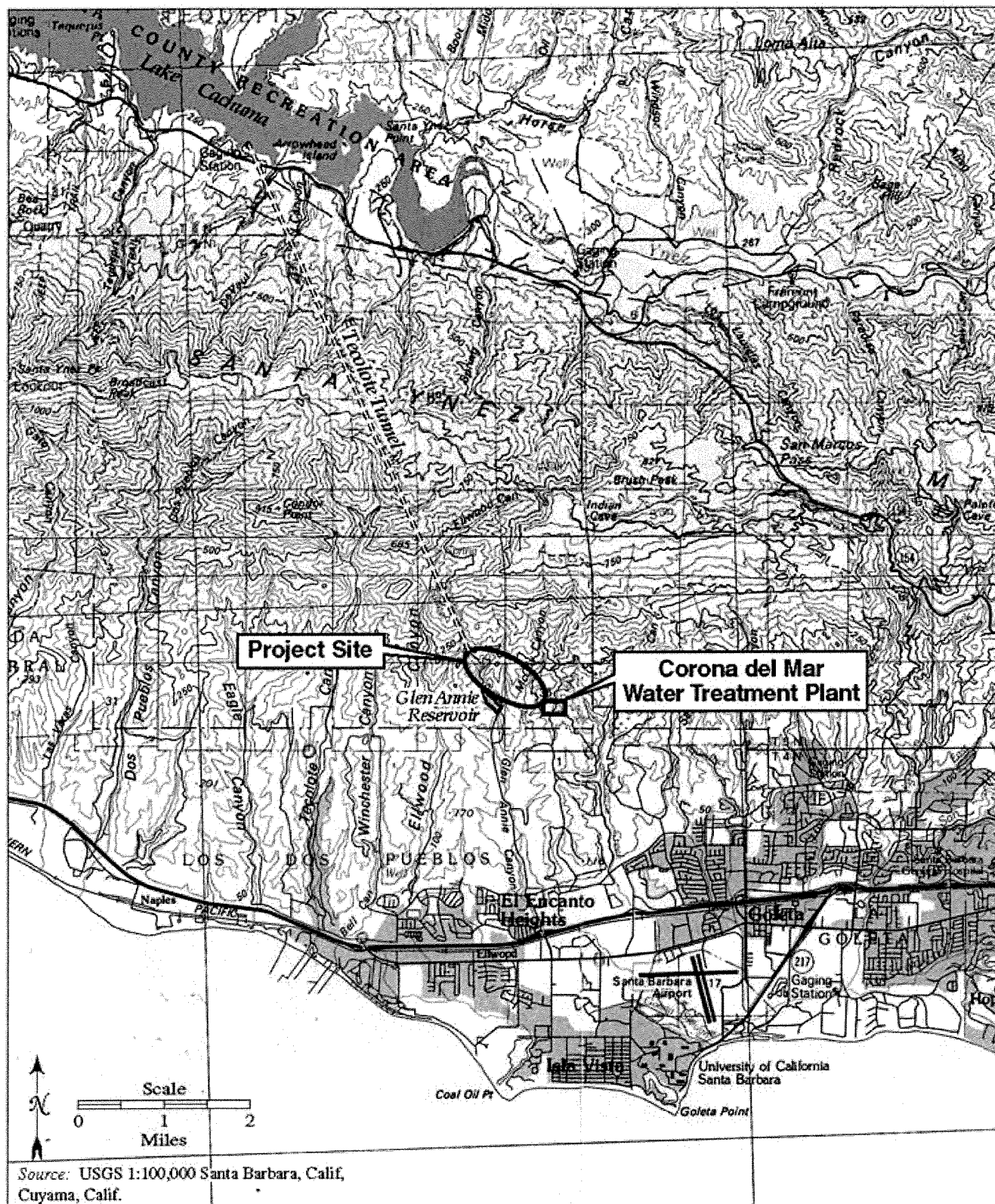


Figure 1. Regional Location Map

## PROJECT ALTERNATIVES

NEPA (40 C.F.R. 1502.14[a]) and CEQA Guidelines (15126.6) require that an EIS and an EIR examine alternatives to a project in order to explore a reasonable range of alternatives that meet most of the basic project objectives, while reducing the severity of potentially significant environmental impacts. The EIS/EIR will compare merits of the alternatives and determine an environmentally superior alternative. The three alternatives selected for detailed analysis in the EIS/EIR include Alternative A (parallel) pipeline, Alternative B (non-parallel) pipeline, and the No Project/No Action Alternative.

Two alternative alignments are being proposed under the current application: the Alternative A pipeline would be constructed adjacent to the existing pipeline alignment; and the Alternative B pipeline alignment would include portions along the existing pipeline easements; however, this alignment would generally be constructed southwest of the existing pipeline. Both pipeline alignments would require crossings at the West Fork and the main stem of Glen Annie Creek.

Construction of the Alternative A and Alternative B pipeline alignments would connect to SCC structures at the South Portal, Glen Annie Structure, and CDMWTP. A new South Portal diversion/wasteway structure would be constructed to divert water into each pipeline. Magnetic flowmeters would be installed at the South Portal (or CDMWTP) to provide improved flowrate measurement accuracy. In order to shut down one of the pipelines for maintenance tasks, the structure includes the installation of slide gates (or butterfly valves). Modifications to the CDMWTP turnout structure would also be required to control flows. The existing vent structure would potentially be demolished because the turnout structure functions as a hydraulic control structure; however, a vacuum release valve (or vent) would need to be provided downstream of the CDMWTP turnout.

Alternative A (parallel) pipeline would require construction of an intertie at the Glen Annie Structure with improvements to the turnout structure that maintain the hydraulic grade line (HGL) to the Goleta West Conduit (GWC). Several options would be evaluated for connecting the Alternative B (non-parallel) pipeline to the Glen Annie Structure, including connecting the proposed Alternative B pipeline to the Glen Annie Turnout upstream of the weir that regulates the HGL to the GWC, constructing an intertie of the Alternative B pipeline to the GWC without constructing a supplemental pipeline to the existing Glen Annie Structure, transporting treated water from the CDMWTP to the GWC, or constructing a pipeline from the South Portal diversion structure to directly supply the GWC. The alternatives may include structures for pumping and/or disinfection facilities.

The No Project/No Action Alternative would include construction of site improvements and operational activities that could occur without issuance of federal permits. Buildout under this alternative would not include any stream crossings that would require a Section 404 permit from the U.S. Army Corps of Engineers (USACE).

## POTENTIAL PROJECT IMPACTS

The EIS/EIR scoping process is designed to elicit comments from the public, responsible agencies, and interested parties on the scope of the EIS/EIR. A preliminary list of potential impacts that could result from project implementation is identified below to initiate the scoping process:

**Aesthetics:** Effects on a scenic vista or damage to a scenic vista; degradation of the existing visual character associated with vegetation removal and the proposed revegetation plan.

**Air Quality:** Adverse impacts associated with generation of volatile organic compounds (VOC), nitrogen oxides (NOx), and fugitive dust from project emission sources during construction.

**Biological Resources:** Temporary disturbance to, or permanent loss of oak and riparian woodland habitats, wetland and aquatic habitats, and native shrub communities; impacts on listed and sensitive species and/or habitat; and erosion and runoff impacts on aquatic habitats.

**Cultural Resources:** Potential impacts on cultural resources associated with grading, cut-and-fill excavation, clearing/vegetation removal, and trenching.

**Geology and Soils:** Potential for erosion and slope failure during project construction.

**Hazards and Hazardous Materials:** Potential for accidents during transport, refueling, and other uses of chemicals on-site during construction.

**Hydrology and Water Quality:** Adverse effects associated with construction activities at the stream crossings and the temporary diversion of creek flow, or pumping of groundwater from the excavation if the crossings are not installed by boring; potential for erosion and increased sediment runoff during construction.

**Noise:** Temporary or periodic increases in ambient noise levels in the project vicinity.

**Transportation/Traffic:** Vehicular traffic impacts on the adjacent road network.

## EIS/EIR SCOPING PROCESS

Reclamation and COMB will seek public input on topics, issues, and alternatives to be considered in the EIS/EIR during scoping meetings to be held during May, 2007. Scoping is an open process of eliciting comment on the contents of the EIS/EIR from responsible, trustee, and reviewing agencies, and interested parties. The views of your agency, relative to the statutory responsibilities of your agency in connection with the proposed project, are being solicited in an effort to determine the scope and content of the environmental document.

**Dates and Addresses:** The schedule and locations of the project public scoping meeting is as follows:

- Scoping Meeting: Thursday, May 17, 2007; 7:00 p.m. - 9:00 p.m.; COMB Office; 3301 Laurel Canyon Road; Santa Barbara, CA 93105

**Special Assistance:** If special assistance is required for these meetings, please contact Brett Gray, Cachuma Operations and Maintenance Board, no less than five working days before the meeting to allow Reclamation/COMB to secure the needed services.

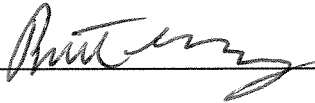
#### **DISCLOSURE OF PUBLIC COMMENTS**

Our practice is to make comments available, including names and addresses of respondents, for public review. Individual respondents may request that we withhold their home address from public disclosure, which we will honor to the extent allowable by law. There may be other circumstances in which we would withhold a respondent's identify from public disclosure, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. We will make available for public disclosure, in their entirety, all submissions from organizations or businesses, and from individuals identifying themselves as representatives of officials of organizations of businesses.

#### **FOR FURTHER INFORMATION**

Contact Ms. Laura Myers, Bureau of Reclamation, 1243 N Street, Fresno, CA, 93721, email: [lmyers@mp.usbr.gov](mailto:lmyers@mp.usbr.gov), telephone: (559) 487-5179, fax: (559) 487-5397, or Mr. Brett Gray, Cachuma Operations and Maintenance Board, 3301 Laurel Canyon Road, Santa Barbara, CA, 93105-2017, telephone: (805) 687-4011, fax: (805) 569-5825. Additional information is available online at <http://www.usbr.gov/>

Signed: \_\_\_\_\_



Date: \_\_\_\_\_

4-11-07

## Notice of Completion & Environmental Document Transmittal

For U.S. Mail: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044

For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH# TBD

Project Title: South Coast Conduit/Upper Reach Reliability Project

Lead Agency: Bureau of Reclamation (NEPA); Cachuma Operation & Maintenance Board (CEQA)

Contact Person: Brett Gray (CEQA)

Street Address: Cachuma Operation and Maintenance Board  
3301 Laurel Canyon Road

Phone: 805-687-4011

City: Santa Barbara

Zip: 93105

County: Santa Barbara

Project Location: See NOP

County: See NOP

City/Nearest Community: See NOP

Cross Streets: See NOP

Zip: See NOP

Total Acres: 12

Assessor's Parcel No. NA Section: NA Twp: NA Range: NA Base: NA

Within 2 Miles: State Hwy#: NA Waterways: Glen Annie Creek

Airports: NA Railways: NA Schools: NA

### Document Type:

CEQA: ☒ NOP ☐ Supplement/Subsequent EIR ☐ Early Cons (Prior SCH No.) ☐ Neg Dec ☐ Draft EIR ☐ Other NEPA: ☒ NOI ☐ EA ☐ Draft EIS ☐ FONSI Other: ☐ Joint Document ☐ Final Document ☐ Other

### Local Action Type:

☐ General Plan Update ☐ Specific Plan ☐ Rezone ☐ Annexation  
☐ General Plan Amendment ☐ Master Plan ☐ Prezone ☐ Redevelopment  
☐ General Plan Element ☐ Planned Unit Development ☐ Use Permit ☐ Coastal Permit  
☐ Community Plan ☐ Site Plan ☐ Land Division (Subdivision, etc.) ☒ Other Project Approval

### Development Type:

☐ Residential: Units \_\_\_\_\_ Acres \_\_\_\_\_ ☒ Water Facilities: Type Secondary pipeline  
☐ Office: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_ ☐ Transportation: Type \_\_\_\_\_  
☐ Commercial: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_ ☐ Mining: Mineral \_\_\_\_\_  
☐ Industrial: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_ ☐ Power: Type \_\_\_\_\_ Watts \_\_\_\_\_  
☐ Educational \_\_\_\_\_ ☐ Waste Treatment: Type \_\_\_\_\_  
☐ Recreational \_\_\_\_\_ ☐ Hazardous Waste: Type \_\_\_\_\_  
☒ Total Acres: (approx) 12 ☐ Other: \_\_\_\_\_

### Project Issues That May Have A Significant Or Potentially Significant Impact:

☐ Aesthetic/Visual ☐ Flood Plain/Flooding ☐ Schools/Universities ☒ Water Quality  
☐ Agricultural Land ☐ Forest Land/Fire Hazard ☐ Septic Systems ☐ Water Supply/Groundwater  
☒ Air Quality ☒ Geologic/Seismic ☐ Sewer Capacity ☒ Wetland/Riparian  
☒ Archeological/Historical ☐ Minerals ☒ Soil Erosion/Compaction/Grading ☒ Wildlife  
☐ Coastal Zone ☒ Noise ☐ Solid Waste ☐ Growth Inducing  
☒ Drainage/Absorption ☐ Population/Housing ☒ Toxic/Hazardous ☐ Land Use  
☐ Economic/Jobs ☐ Public Services/Facilities ☒ Traffic/Circulation ☒ Cumulative Effects  
☐ Fiscal ☐ Recreation/Parks ☒ Vegetation ☐ Other

**Present Land Use/Zoning/General Plan Designation:**

As the project site supports State Water Project infrastructure, the site is not subject to local zoning except as permitted by the California Legislature.

**Project Description:**

See NOP

**Reviewing Agencies Checklist**

*Lead Agencies may recommend State Clearinghouse distribution by marking agencies below.*

<input checked="" type="checkbox"/>	Air Resources Board	<input type="checkbox"/>	Housing and Community Development
<input type="checkbox"/>	Boating and Waterways, Department of	<input type="checkbox"/>	Integrated Waste Management Board
<input type="checkbox"/>	California Highway Patrol	<input checked="" type="checkbox"/>	Native American Heritage Commission
<input checked="" type="checkbox"/>	Caltrans District 7	<input type="checkbox"/>	Office of Emergency Services
<input type="checkbox"/>	Caltrans Division of Aeronautics	<input type="checkbox"/>	Office of Historic Preservation
<input type="checkbox"/>	Caltrans Planning	<input type="checkbox"/>	Parks and Recreation
<input type="checkbox"/>	Coachella Valley Mountains Conservancy	<input type="checkbox"/>	Pesticide Regulation, Department of
<input type="checkbox"/>	Coastal Commission	<input type="checkbox"/>	Public Utilities Commission
<input type="checkbox"/>	Colorado River Board Commission	<input type="checkbox"/>	Reclamation Board
<input type="checkbox"/>	Conservation, Department of	<input checked="" type="checkbox"/>	Resources Agency
<input type="checkbox"/>	Corrections, Department of	<input type="checkbox"/>	S.F. Bay Conservation & Development Comm.
<input type="checkbox"/>	Delta Protection Commission	<input type="checkbox"/>	San Gabriel and Lower LA Rivers and Mts Conservancy
<input type="checkbox"/>	Education, Department of	<input type="checkbox"/>	San Joaquin River Conservancy
<input type="checkbox"/>	Office of Public School Construction	<input type="checkbox"/>	Santa Monica Mountains Conservancy
<input type="checkbox"/>	Energy Commission	<input type="checkbox"/>	State Lands Commission
<input checked="" type="checkbox"/>	Fish and Game	<input type="checkbox"/>	SWRCB: Clean Water Grants
<input type="checkbox"/>	Food and Agriculture, Department of	<input checked="" type="checkbox"/>	SWRCB: Water Quality
<input type="checkbox"/>	Forestry and Fire Protection	<input type="checkbox"/>	Tahoe Regional Planning Agency
<input type="checkbox"/>	General Service, Department of	<input type="checkbox"/>	Toxic Substances Control, Department of
<input type="checkbox"/>	Health Services, Department of	<input checked="" type="checkbox"/>	Water Resources, Department of
		<input checked="" type="checkbox"/>	Other: <b>To be Determined by SCH as applicable</b>

**Local Public Review Period (to be filled in by lead agency)**

Starting Date April 12, 2007

Ending Date: June 17, 2007

**Lead Agency (Complete if applicable)**

Cachuma Operation and Maintenance Board

Address: 3301 Laurel Canyon Road

City/State/Zip: Santa Barbara, CA 93105

Contact: Brett Gray

Phone: 805-687-4011

**Applicant**

Same as lead agency

Address: NA

City/State/Zip: NA

Contact: NA

Phone: NA

Signature of Lead Agency Representative:



Date:

4-11-07

## ***Appendix B***

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### Air Quality Technical Data

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**Table 1. Emission Source Data for Construction of the South Coast Conduit (SCC) Project - Preferred Alternative.**

<i>Activity/Equipment Type</i>	<i>Hp Rating</i>	<i>Ave. Daily Load Factor</i>	<i>Number Active</i>	<i>Hourly Hp-Hrs</i>	<i>Hours/Day</i>	<i>Daily Hp-Hrs</i>	<i>Work Days</i>	<i>Total Hp-Hrs</i>
<b>Construction Activity A</b>								
Excavator	200	0.50	1	100	7	700	160	112,000
Loader	200	0.60	1	120	4	480	160	76,800
Water Truck	300	0.40	1	120	7	840	160	134,400
Welder	60	0.30	2	36	7	252	160	40,320
On-road Truck - Pipe delivery (1)	NA	NA	52	NA	58	NA	NA	3,016
On-road Truck - Aggregate delivery (1)	NA	NA	405	NA	107	NA	NA	43,335
Fugitive Dust (2)	NA	NA	2	NA	7	NA	160	320
<b>Construction Activity B</b>								
Excavator	200	0.60	1	120	7	840	160	134,400
Loader	200	0.60	1	120	7	840	160	134,400
Bulldozer	300	0.60	1	180	7	1,260	20	25,200

Notes: (1) Number Active = total truck trips, Hours/Day = miles/roundtrip, and Total Hp-Hrs = total miles.

(2) Number Active is acres disturbed at one time and Total Hp-Hrs is acre-days for the entire activity.

**Table 2. Air Emission Factors for Construction and Operation of the SCC Project.**

Source Type	Fuel Type	Emission Factors (Grams/Horsepower-Hour)						References
		ROG	CO	NOx	SOx	PM10	PM2.5	
Off-Road Equipment								
Off-Road Equipment - 51-120 Hp	D	0.99	3.49	6.90	0.006	0.69	0.63	(1)
Off-Road Equipment - 176-250 Hp	D	0.32	0.92	6.25	0.006	0.15	0.14	(1)
Off-Road Equipment - 251-500 Hp	D	0.32	0.92	6.25	0.006	0.15	0.14	(1)
On-Road Trucks - 2009 Annual Average								
On-road Truck - Idle (Gms/Hr)	D	7.93	41.16	65.79	0.04	1.08	0.99	(2)
On-road Truck - 5 mph (Gms/Mi)	D	5.70	31.28	20.57	0.03	1.25	1.15	(2)
On-road Truck - 25 mph (Gms/Mi)	D	0.90	9.07	9.93	0.01	0.41	0.38	(2)
On-road Truck - 55 mph (Gms/Mi)	D	0.46	6.09	10.67	0.01	0.32	0.29	(2)
On-road Truck - Composite (Gms/Mi)	D	1.07	9.21	11.51	0.01	0.43	0.40	(3)
On-Road Trucks - 2009 Max. Monthly								
On-road Truck - Idle (Gms/Hr)	D	8.26	46.72	67.42	0.04	1.21	1.11	(4)
On-road Truck - 5 mph (Gms/Mi)	D	5.71	31.74	21.20	0.03	1.26	1.16	(4)
On-road Truck - 25 mph (Gms/Mi)	D	0.90	9.20	10.28	0.01	0.41	0.38	(4)
On-road Truck - 55 mph (Gms/Mi)	D	0.46	6.19	11.05	0.01	0.32	0.29	(4)
On-road Truck - Composite (Gms/Mi)	D	1.07	9.35	11.91	0.01	0.43	0.40	(3)
On-Road Trucks - 2009 Max. Monthly								
On-road Truck - 5 mph (Gms/Mi)	G	0.68	8.78	0.98	0.01	0.11	0.11	(5)
On-road Truck - 25 mph (Gms/Mi)	G	0.19	4.83	0.63	0.01	0.04	0.04	(5)
On-road Truck - Composite (Gms/Mi)	G	0.39	6.41	0.77	0.01	0.07	0.07	(6)
Other								
Fugitive Dust (Lbs/acre-day)	---	-	-	-	-	55.00	5.61	(7)

Notes: (1) Zero hour emission factors for year 2000 (251-500 Hp), year 2002 (176-250 Hp), and year 2003 (51-120 Hp), as presented in the ARB OFFROAD2007 emissions model (ARB 2006).

(2) Heavy duty diesel truck emission factors developed from EMFAC2007 (ARB 2006). Units in grams/mile for running mode and grams/hour for idle mode for project year 2009. Based on annual average conditions at 60 degrees and 50% humidity. PM emission factors include combustive and tire/brake wear contributions.

(3) Composite factors based on a round trip of 10% at 5 mph, 20% at 25 mph, and 70% at 55 mph. Units in grams/mile.

Although not shown in these calculations, emissions from 10 minutes of idling mode included for each truck round trip.

(4) Same as (2), except = maximum emission factors for either January or July.

(5) Same as (2), except for gasoline-powered light-duty trucks. Data are the maximum emission factors for either January or July.

(6) Composite factors based on a round trip of 40% at 5 mph and 60% at 25 mph. Units in grams/mile.

(7) Units in lbs/acre-day from section 11.2.3 of AP-42 (EPA 1995). Emissions reduced by 50% from uncontrolled levels to

Table 3. Total Air Emissions from Construction of the SCC Project - Preferred Alternative.

<i>Construction Activity/Equipment Type</i>	<i>Tons per Year</i>					
	<i>VOC</i>	<i>CO</i>	<i>NOx</i>	<i>SOx</i>	<i>PM10</i>	<i>PM2.5</i>
<b>Construction Activity A</b>						
Excavator	0.04	0.11	0.77	0.00	0.02	0.02
Loader	0.03	0.08	0.53	0.00	0.01	0.01
Water Truck	0.05	0.14	0.93	0.00	0.02	0.02
Welder	0.04	0.16	0.31	0.00	0.03	0.03
On-road Truck - Pipe delivery	0.00	0.03	0.04	0.00	0.00	0.00
On-road Truck - Aggregate delivery	0.05	0.46	0.58	0.00	0.02	0.02
Fugitive Dust	-	-	-	-	8.80	0.90
<b>Construction Activity B</b>						
Excavator	0.05	0.14	0.93	0.00	0.02	0.02
Loader	0.05	0.14	0.93	0.00	0.02	0.02
Bulldozer	0.01	0.03	0.17	0.00	0.00	0.00
<b>Total</b>	<b>0.32</b>	<b>1.27</b>	<b>5.18</b>	<b>0.01</b>	<b>8.96</b>	<b>1.04</b>
<b>Conformity Thresholds - Tons per Year</b>	<b>100</b>	<b>NA</b>	<b>100</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

**Table 4. Emission Source Data for Construction of the South Coast Conduit (SCC) Project - Alternative A.**

<i>Activity/Equipment Type</i>	<i>Hp Rating</i>	<i>Ave. Daily Load Factor</i>	<i>Number Active</i>	<i>Hourly Hp-Hrs</i>	<i>Hours/Day</i>	<i>Daily Hp-Hrs</i>	<i>Work Days</i>	<i>Total Hp-Hrs</i>
<b>Construction Activity A</b>								
Excavator	200	0.75	1	150	7	1,050	160	168,000
Loader	200	0.60	1	120	7	840	160	134,400
Water Truck	300	0.40	1	120	7	840	160	134,400
Welder	60	0.60	2	72	7	504	160	80,640
On-road Truck - Pipe delivery (1)	NA	NA	52	NA	58	NA	NA	3,016
On-road Truck - Aggregate delivery (1)	NA	NA	405	NA	107	NA	NA	43,335
Fugitive Dust (2)	NA	NA	2	NA	7	NA	160	320
<b>Construction Activity B</b>								
Excavator	200	0.60	1	120	7	840	160	134,400
Loader	200	0.60	1	120	7	840	160	134,400
Bulldozer	300	0.60	1	180	7	1,260	20	25,200

Notes: (1) Number Active = total truck trips, Hours/Day = miles/roundtrip, and Total Hp-Hrs = total miles.

(2) Number Active is acres disturbed at one time and Total Hp-Hrs is acre-days for the entire activity.

Table 5. Total Air Emissions from Construction of the SCC Project - Alternative A.

<i>Construction Activity/Equipment Type</i>	<i>Tons per Year</i>					
	<i>VOC</i>	<i>CO</i>	<i>NOx</i>	<i>SOx</i>	<i>PM10</i>	<i>PM2.5</i>
<b>Construction Activity A</b>						
Excavator	0.06	0.17	1.16	0.00	0.03	0.03
Loader	0.05	0.14	0.93	0.00	0.02	0.02
Water Truck	0.05	0.14	0.93	0.00	0.02	0.02
Welder	0.09	0.31	0.61	0.00	0.06	0.06
On-road Truck - Pipe delivery	0.00	0.03	0.04	0.00	0.00	0.00
On-road Truck - Aggregate delivery	0.05	0.46	0.58	0.00	0.02	0.02
Fugitive Dust	-	-	-	-	8.80	0.90
<b>Construction Activity B</b>						
Excavator	0.05	0.14	0.93	0.00	0.02	0.02
Loader	0.05	0.14	0.93	0.00	0.02	0.02
Bulldozer	0.01	0.03	0.17	0.00	0.00	0.00
<b>Total</b>	<b>0.40</b>	<b>1.54</b>	<b>6.27</b>	<b>0.01</b>	<b>9.00</b>	<b>1.09</b>
<b>Conformity Thresholds - Tons per Year</b>	<b>100</b>	<b>NA</b>	<b>100</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

Table 6. Emission Source Data for Construction of the South Coast Conduit (SCC) Project - Alternative B.

<i>Activity/Equipment Type</i>	<i>Hp Rating</i>	<i>Ave. Daily Load Factor</i>	<i>Number Active</i>	<i>Hourly Hp-Hrs</i>	<i>Hours/Day</i>	<i>Daily Hp-Hrs</i>	<i>Work Days</i>	<i>Total Hp-Hrs</i>
<b>Construction Activity A</b>								
Excavator	200	0.75	1	150	7	1,050	192	201,600
Loader	200	0.60	1	120	7	840	192	161,280
Water Truck	300	0.40	1	120	7	840	192	161,280
Welder	60	0.60	2	72	7	504	192	96,768
On-road Truck - Pipe delivery (1)	NA	NA	52	NA	58	NA	NA	3,016
On-road Truck - Aggregate delivery (1)	NA	NA	405	NA	107	NA	NA	43,335
Fugitive Dust (2)	NA	NA	2	NA	7	NA	192	384
<b>Construction Activity B</b>								
Excavator	200	0.60	1	120	7	840	192	161,280
Loader	200	0.60	1	120	7	840	192	161,280
Bulldozer	300	0.60	1	180	7	1,260	24	30,240

Notes: (1) Number Active = total truck trips, Hours/Day = miles/roundtrip, and Total Hp-Hrs = total miles.

(2) Number Active is acres disturbed at one time and Total Hp-Hrs is acre-days for the entire activity.

Table 7. Total Air Emissions from Construction of the SCC Project - Alternative B.

<i>Construction Activity/Equipment Type</i>	<i>Tons per Year</i>					
	<i>VOC</i>	<i>CO</i>	<i>NOx</i>	<i>SOx</i>	<i>PM10</i>	<i>PM2.5</i>
<b>Construction Activity A</b>						
Excavator	0.07	0.20	1.39	0.00	0.03	0.03
Loader	0.06	0.16	1.11	0.00	0.03	0.02
Water Truck	0.06	0.16	1.11	0.00	0.03	0.02
Welder	0.11	0.37	0.74	0.00	0.07	0.07
On-road Truck - Pipe delivery	0.00	0.03	0.04	0.00	0.00	0.00
On-road Truck - Aggregate delivery	0.05	0.46	0.58	0.00	0.02	0.03
Fugitive Dust	-	-	-	-	10.56	1.08
<b>Construction Activity B</b>						
Excavator	0.06	0.16	1.11	0.00	0.03	0.02
Loader	0.06	0.16	1.11	0.00	0.03	0.02
Bulldozer	0.01	0.03	0.21	0.00	0.01	0.00
<b>Total</b>	<b>0.47</b>	<b>1.75</b>	<b>7.40</b>	<b>0.01</b>	<b>10.80</b>	<b>1.31</b>
<b>Conformity Thresholds - Tons per Year</b>	<b>100</b>	<b>NA</b>	<b>100</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

**Table 8. Emission Source Data for Operation of the South Coast Conduit (SCC) Project - Preferred Alternative.**

<i>Activity/Equipment Type</i>	<i>Hp Rating</i>	<i>Ave. Daily Load Factor</i>	<i>Number Active</i>	<i>Hourly Hp-Hrs</i>	<i>Hours/Day</i>	<i>Daily Hp-Hrs</i>	<i>Work Days</i>	<i>Total Hp-Hrs</i>
<b>Operations</b>								
Backhoe	90	0.50	1	45	5	225	5	1,125
Loader	80	0.50	1	40	5	200	5	1,000
Light Duty Truck - Gasoline (3)	NA	NA	2	NA	20	40	100	4,000

Notes: (1) Number Active trips per day, Hours/Day = miles/trip, Daily Hp-Hrs = miles/day, and Total Hp-Hrs = total miles.

**Table 9. Emission Source Data for Operation of the South Coast Conduit (SCC) Project - Alternatives A or B.**

<i>Activity/Equipment Type</i>	<i>Hp Rating</i>	<i>Ave. Daily Load Factor</i>	<i>Number Active</i>	<i>Hourly Hp-Hrs</i>	<i>Hours/Day</i>	<i>Daily Hp-Hrs</i>	<i>Work Days</i>	<i>Total Hp-Hrs</i>
<b>Operations</b>								
Backhoe	90	0.60	1	54	5	270	5	1,350
Loader	80	0.60	1	48	5	240	5	1,200
Light Duty Truck - Gasoline (3)	NA	NA	2	NA	20	40	100	4,000

Notes: (1) Number Active trips per day, Hours/Day = miles/trip, Daily Hp-Hrs = miles/day, and Total Hp-Hrs = total miles.



Table 10. Daily and Annual Air Emissions from the Operation of the SCC Project - Preferred Alternative.

<i>Emissions Period/Equipment Type</i>	<i>VOC</i>	<i>CO</i>	<i>NOx</i>	<i>SOx</i>	<i>PM10</i>	<i>PM2.5</i>
<i>Daily Emissions</i>	<i>Pounds per Day</i>					
Backhoe	0.49	1.73	3.42	0.00	0.34	0.31
Loader	0.44	1.54	3.04	0.00	0.30	0.28
Light Duty Truck - Gasoline	0.03	0.57	0.07	0.00	0.01	0.01
<b>Daily Total - All Sources</b>	<b>0.96</b>	<b>3.84</b>	<b>6.53</b>	<b>0.01</b>	<b>0.65</b>	<b>0.60</b>
<b>Daily Total - On-road Vehicles Only</b>	<b>0.03</b>	<b>0.57</b>	<b>0.07</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>
<b>SBCAPCD Daily Thresholds - All Sources</b>	<b>240</b>	<b>NA</b>	<b>240</b>	<b>NA</b>	<b>80</b>	<b>NA</b>
<b>SBCAPCD Daily Thresholds - On-road Vehicles Only</b>	<b>25</b>	<b>NA</b>	<b>25</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
<i>Annual Emissions</i>	<i>Tons per Year</i>					
Backhoe	0.00	0.00	0.01	0.00	0.00	0.00
Loader	0.00	0.00	0.01	0.00	0.00	0.00
Light Duty Truck - Gasoline	0.00	0.03	0.00	0.00	0.00	0.00
<b>Annual Total - Tons</b>	<b>0.00</b>	<b>0.04</b>	<b>0.02</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Conformity Thresholds - Tons/year</b>	<b>100</b>	<b>NA</b>	<b>100</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

Table 11. Daily and Annual Air Emissions from the Operation of the SCC Project - Preferred Alternative.

<i>Emissions Period/Equipment Type</i>	<i>VOC</i>	<i>CO</i>	<i>NOx</i>	<i>SOx</i>	<i>PM10</i>	<i>PM2.5</i>
<i>Daily Emissions</i>	<i>Pounds per Day</i>					
Backhoe	0.59	2.08	4.11	0.00	0.41	0.38
Loader	0.52	1.85	3.65	0.00	0.37	0.34
Light Duty Truck - Gasoline	0.03	0.57	0.07	0.00	0.01	0.01
<b>Daily Total - All Sources</b>	<b>1.15</b>	<b>4.49</b>	<b>7.83</b>	<b>0.01</b>	<b>0.78</b>	<b>0.72</b>
<b>Daily Total - On-road Vehicles Only</b>	<b>0.03</b>	<b>0.57</b>	<b>0.07</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>
<b>SBCAPCD Daily Thresholds - All Sources</b>	<b>240</b>	<b>NA</b>	<b>240</b>	<b>NA</b>	<b>80</b>	<b>NA</b>
<b>SBCAPCD Daily Thresholds - On-road Vehicles Only</b>	<b>25</b>	<b>NA</b>	<b>25</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
<i>Annual Emissions</i>	<i>Tons per Year</i>					
Backhoe	0.00	0.01	0.01	0.00	0.00	0.00
Loader	0.00	0.00	0.01	0.00	0.00	0.00
Light Duty Truck - Gasoline	0.00	0.03	0.00	0.00	0.00	0.00
<b>Annual Total - Tons</b>	<b>0.00</b>	<b>0.04</b>	<b>0.02</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Conformity Thresholds - Tons/year</b>	<b>100</b>	<b>NA</b>	<b>100</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

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## ***Appendix C***

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### Level of Service Definitions

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## LEVEL OF SERVICE DEFINITIONS

In rating roadway and intersection operations, “Levels of Service” (LOS) A through F are used, with LOS A indicating free flow operations and LOS F indicating congested operations.

**LOS A:** Highest quality of service a particular class of highway can provide. It is a condition of free flow in which there is little or no restriction on speed or maneuverability caused by the presence of other vehicles. Operation speed is in the highest range and density is low. This condition generally exists when the traffic volume is 35 percent or less of the roadway capacity.

**LOS B:** A zone of stable flow. Operating speed is beginning to be restricted by other traffic. Restriction on maneuver is still negligible, and there is little probability of major restriction in speed or flow rate. This condition generally exists when the traffic volume is at 35 percent to 55 percent of the roadway capacity.

**LOS C:** Still a zone of stable flow, but at this volume and density level, most drivers are becoming restricted in their freedom to select speed, change lanes, or pass. Operation speeds are still in the range of  $\frac{2}{3}$  to  $\frac{3}{4}$  of maximum. This condition generally exists when the traffic volume is at 55 percent to 75 percent of the roadway capacity.

**LOS D:** Approaches unstable flow. Tolerable operating speeds are maintained, but are subject to considerable and sudden variation. Freedom to maneuver and driving comfort are low because lane density has increased and the probability of accidents has increased. Most drivers would consider this LOS unsatisfactory. This condition generally exists when the traffic volume is at 75 percent to 90 percent of the roadway capacity.

**LOS E:** The upper limit of LOS E is the capacity of the roadway. Operation in this zone is unstable, speeds and flow rates fluctuate, and there is little independence of speed selection or maneuver. Headways are short and operation speeds subject to rapid fluctuation, driving comfort is low and accident potential is high. This LOS is clearly undesirable.

**LOS F:** LOS F describes forced flow operations after traffic has exceeded the design capacity of the roadway. Speed and rate of flow are below the levels attained in LOS E and may, for short periods of time, drop to zero.

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## ***Appendix D***

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### Mitigation Monitoring and Reporting Plan

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### South Coast Conduit/Upper Reach Reliability Project Mitigation Monitoring and Reporting Plan

<i>Mitigation Measure</i>	<i>Implementation Procedure or Action</i>	<i>Organization Responsible for Implementation</i>	<i>Reporting/ Notification Requirement</i>	<i>Compliance Schedule</i>	<i>Verification of Compliance</i>
	<b>AESTHETICS</b>				
<b>AES-2</b>	Covered receptacles shall be provided onsite prior to commencement of grading or construction activities to prevent construction and/or employee trash from blowing offsite. The applicant or designee shall retain a clean-up crew to ensure that trash and all excess construction debris is collected daily or more frequently, as directed by compliance monitors, and placed in provided receptacles throughout construction.	COMB		Prior to and during construction	Responsible Party: COMB
	<b>BIOLOGICAL RESOURCES</b>				
<b>BIO-1.1</b>	Santa Barbara honeysuckle plants shall be avoided to the greatest extent feasible during construction. Locations of this species within the construction corridor shall be clearly marked on the project plans and in the field by a qualified biologist prior to construction. The qualified biologist shall work with the Resident Engineer and construction contractor to determine which of these areas cannot be avoided. For the areas that cannot be avoided, cover of Santa Barbara honeysuckle shall be recorded using line-intercept sampling and will form the restoration criterion.	COMB	Specifications shall be included in the final construction plans	Prior to vegetation removal	Responsible Party: COMB
<b>BIO-1.2</b>	The project Revegetation Plan (see Section 2.3.2) shall include specific measures for restoring Santa Barbara honeysuckle to pre-project cover.	COMB	Specifications shall be included in the Revegetation Plan	Prior to construction	Responsible Party: COMB
<b>BIO-1.3</b>	<p>A Special Status Species Protection Plan shall be prepared and implemented to minimize or avoid impacts to special status biological resources, including aquatic habitats, during pipeline construction. Habitat and species protection measures shall include, at a minimum:</p> <ol style="list-style-type: none"> <li>1. Construction shall be scheduled to avoid the breeding season of special status species. For example, schedule pipeline construction (or at a minimum, crossing of drainages that support special status aquatic species) to avoid the breeding season for the California red-legged frog (November 1 through May 30) and steelhead migration and spawning (February 1 through March 31) or to occur while water is not present;</li> <li>2. Work shall be scheduled to avoid the high flow seasons (October through April) if trenching is used to cross the two seasonal drainages to avoid potential impacts to downstream resources, including breeding habitat for the California red-legged frog and steelhead;</li> <li>3. A USFWS-approved California red-legged frog biologist shall conduct pre-construction California red-legged frog surveys following USFWS protocols in all suitable habitat crossed by the pipeline right-of-way (the West Fork and main stem of Glen Annie Creek) to determine the presence or absence of this species within about 500 feet (152 meters) of the construction area;</li> <li>4. A qualified biologist with the appropriate permits shall be present during construction in habitats that support special status species;</li> </ol>	COMB	Specifications shall be included in the final construction plans	Prior to and during construction	Responsible Party: COMB

**South Coast Conduit/Upper Reach Reliability Project Mitigation Monitoring and Reporting Plan (continued)**

<i>Mitigation Measure</i>	<i>Implementation Procedure or Action</i>	<i>Organization Responsible for Implementation</i>	<i>Reporting/ Notification Requirement</i>	<i>Compliance Schedule</i>	<i>Verification of Compliance</i>
	<b>BIOLOGICAL RESOURCES (CONTINUED)</b>				
<b>BIO-1.3 (cont.)</b>	<p>5. The project biologist and the project engineer shall clearly designate “sensitive resource zones” on the project maps and construction plans. Sensitive resource zones are defined as areas where construction would be limited in space, time, or methods to minimize or avoid impacts to special status species or their habitat;</p> <p>6. A USFWS-approved California red-legged frog biologist shall be present during construction in locations known to support California red-legged frogs to monitor for this species. The biologist shall inspect the work area (especially areas with ponded water, if present) for the presence of the species and shall be authorized to temporarily stop work if immediate threats to the species are identified during monitoring. Any disturbances to occupied habitat or red-legged frogs shall be in conformance with the terms and conditions of the project Biological Opinion from the USFWS;</p> <p>7. All machinery shall be stored and fuelled in designated locations at least 100 feet (30.5 meters) away from any sensitive habitats or in areas approved by the project biologist. Heavy equipment and construction activities shall be restricted to the defined construction corridor. Construction vehicles and personnel shall use existing access roads;</p> <p>8. A qualified biologist shall conduct pre-construction surveys of the stand of eucalyptus trees for roosting monarch butterflies in the appropriate season. Surveys shall be conducted during the fall and winter (October through December) to verify the presence or absence of autumnal or wintering roost sites. If autumnal or wintering roost sites are identified, the biologist shall work with the resident engineer to either avoid removal of these trees or schedule construction to occur outside of the monarch roosting season when the species would not be present; and any other requirements stipulated by the USFWS and/or NMFS as part of Section 7 Consultation under the ESA shall be implemented.</p>	COMB	Specifications shall be included in the final construction plans	Prior to and during construction	Responsible Party: COMB
<b>BIO-1.4</b>	<p>Glen Annie Creek, including West Fork, bed and banks shall be restored to pre-project conditions to the greatest extent feasible. This shall include disposing of material displaced by the pipe and bedding outside the creek corridor but not over existing topsoil, replacing boulders and cobbles in the stream bed, and contouring to restore the stream bed gradient and bank structure. Biological monitors shall ensure that creek beds and banks are restored correctly and shall work with the construction contractor directly or through the resident engineer.</p> <p>Measures for restoration of riparian woodland shall be included in the Revegetation Plan (see Section 2.3.2). All riparian woodland removed shall be replaced at a 2:1 ratio, or as mandated in project permits. For each acre of riparian woodland that can be restored onsite, an additional acre shall be restored offsite. All permanently impacted riparian woodland shall be restored offsite at a 2:1 ratio.</p>	COMB	Specifications shall be included in the final construction plans	Prior to and during construction	Responsible Party: COMB
<b>BIO-2.1</b>	Measures for restoration of riparian woodland shall be included in the Revegetation Plan (see Section 2.3.2). All riparian woodland removed shall be replaced at a 2:1 ratio, or as mandated in project permits. For each acre of riparian woodland that can be restored onsite, an additional acre shall be restored offsite. All permanently impacted riparian woodland shall be restored offsite at a 2:1 ratio.	COMB	Specifications shall be included in the final construction plans	Prior to and during construction	Responsible Party: COMB

**South Coast Conduit/Upper Reach Reliability Project Mitigation Monitoring and Reporting Plan (continued)**

<i>Mitigation Measure</i>	<i>Implementation Procedure or Action</i>	<i>Organization Responsible for Implementation</i>	<i>Reporting/ Notification Requirement</i>	<i>Compliance Schedule</i>	<i>Verification of Compliance</i>
	<b>BIOLOGICAL RESOURCES (CONTINUED)</b>				
<b>BIO-2.2</b>	Measures for restoration of oak woodland in the Revegetation Plan (see Section 2.3.2) shall include planting individual coast live oak trees at suitable sites and the following specifications. Coast live oak tree 6 inches (15 centimeters) or greater in diameter at breast height (DBH) removed for the project shall be replaced by establishing 10 planted trees meeting minimum performance criteria five years after planting for each tree removed. The performance criteria shall include a period of two years without supplemental watering, a healthy vigorous appearance, minimum height of 6 feet (1.8 meters), and a minimum diameter 1 foot (0.3 meter) above the ground of 2 inches (5 centimeters). In most cases, it will take more than five years for trees to meet these criteria. Oak tree plantings shall be appropriately spaced to promote survival past the monitoring period.	COMB	Specifications shall be included in the final construction plans	Prior to and during construction	Responsible Party: COMB
<b>BIO-3</b>	The following shall be incorporated into the Special Status Species Protection Plan (Mitigation Measure BIO-1.3) to avoid or reduce impacts to migratory and resident breeding birds: 1. A qualified biologist shall conduct pre-construction bird surveys during the nesting season in areas that would require the direct removal of coastal scrub and chaparral vegetation, native and non-native trees, or other areas where suitable nesting habitat for resident or migratory bird species may occur. The surveys shall focus on breeding behavior and nesting locations in the proposed work area and immediately adjacent to that area. Based on the results of the surveys, recommended buffer areas between construction activities and observed nesting habitat shall be provided to the resident engineer if the work were scheduled to occur near those locations while nesting is occurring (February 15 through August 31); 2. A qualified biologist shall be present during removal of vegetation to ensure that breeding wildlife and nesting bird species are not harmed. The biologist shall be able to redirect or temporarily stop work if threats to the species are identified during monitoring; and 3. Riparian vegetation and oak trees scheduled to be removed for construction shall be removed before the nesting season (April 15) to further avoid impacts to nesting birds. For trees outside the area to be trenched, removal should be by cutting at ground level to leave the roots in place to facilitate restoration.	COMB	Specifications shall be included in the final construction plans	Prior to and during construction	Responsible Party: COMB
<b>BIO-4a</b>	The Revegetation Plan shall include a seed mix appropriate for coastal scrub and chaparral areas as well as non-native grassland and other areas to be revegetated. Performance criteria for each plant community shall be included in the Revegetation Plan. Due to the relatively short distance of the project alignment and the similarity of habitats crossed by the project, one diverse seed mix may be developed for the entire route. This seed mix shall be applied to all areas where vegetation was removed.	COMB	Specifications shall be included in the final construction plans	Prior to and during construction	Responsible Party: COMB

**South Coast Conduit/Upper Reach Reliability Project Mitigation Monitoring and Reporting Plan (continued)**

<i>Mitigation Measure</i>	<i>Implementation Procedure or Action</i>	<i>Organization Responsible for Implementation</i>	<i>Reporting/ Notification Requirement</i>	<i>Compliance Schedule</i>	<i>Verification of Compliance</i>
	<b>BIOLOGICAL RESOURCES (CONTINUED)</b>				
<b>BIO-4b.1</b>	Areas of invasive exotic plant infestation shall be identified and mapped within 200 feet (61 meters) of the alignment prior to construction. All such areas within the construction corridor shall be marked on the construction plans and clearly flagged in the field.	COMB	Measure shall be a condition of project approval	Prior to construction	Responsible Party: COMB
<b>BIO-4b.2</b>	Prior to construction, Cape ivy and other weed species shall be controlled. For Cape ivy, control shall consist of herbicide treatment of growing stems where such spraying would not damage adjacent native plants and removing portions of the plants growing within native vegetation that cannot be sprayed. Cape ivy that has been removed from native vegetation shall be hauled off-site to a landfill. Treatment shall encompass a corridor a minimum of 200 feet (61 meters) wide centered on the pipeline alignment. Treatment shall continue a minimum of three times per year, but up to five times per year until all of the performance criteria in the Revegetation Plan have been met.	COMB	Measure shall be a condition of project approval	Prior to construction	Responsible Party: COMB
<b>BIO-4b.3</b>	Unless access is refused by the property owner, the area of invasive exotic plant species infestation (primarily black mustard and Veldt grass) in the vicinity of Ellwood Reservoir shall be treated to reduce invasive exotic plant species growth and encourage non-native annual grasses and native species to recolonize the area. Treatment shall be attempted for two years prior to construction, if feasible. Areas of very dense black mustard may be sprayed aerially or by using a tractor mounted system for efficiency, but areas near native vegetation must be treated by hand. Veldt grass shall be treated by hand as many herbaceous native species co-occur with this species. Treating before construction will greatly reduce the amount of viable seed that could be spread by construction or that could come up following construction.	COMB	Measure shall be a condition of project approval	Prior to construction	Responsible Party: COMB
<b>BIO-4b.4</b>	Extreme caution shall be taken in using equipment, including passenger vehicles and pickups, in areas identified as having invasive exotic plant species infestations. The undercarriage of all vehicles and equipment shall be washed prior to moving to another portion of the project area, including other areas with infestation of different or the same invasive exotic plant species, or moving off the project site. All construction personnel boots must be cleaned to remove invasive exotic plant species propagules (e.g., seeds) when moving from invasive exotic plant species infested areas to other areas of the pipeline or leaving the project site.	COMB	Specifications shall be included in the final construction plans	Prior to and during construction	Responsible Party: COMB
<b>BIO-4b.5</b>	The Revegetation Plan shall include an invasive exotic plant species control component to address invasive exotic plant species removal within the native and naturalized habitats. The Plan shall also establish performance criteria for distribution and density of invasive exotic plant species infestations.	COMB	Specifications shall be included in the final construction plans	Prior to and during construction	Responsible Party: COMB
<b>BIO-4b.6</b>	A weed manual shall be prepared prior to operation and maintenance activities that shall include photographs of the different invasive exotic plant species that are present along the pipeline route. The weed manual shall be distributed to technicians performing maintenance on the structures. They will be instructed to look for invasive exotic plant species infestations along the access roads and at structures. Invasive exotic plant species infestations identified shall be treated or removed.	COMB	Specifications shall be included in the final construction plans	Prior to and during construction	Responsible Party: COMB

**South Coast Conduit/Upper Reach Reliability Project Mitigation Monitoring and Reporting Plan (continued)**

<i>Mitigation Measure</i>	<i>Implementation Procedure or Action</i>	<i>Organization Responsible for Implementation</i>	<i>Reporting/ Notification Requirement</i>	<i>Compliance Schedule</i>	<i>Verification of Compliance</i>
	<b>BIOLOGICAL RESOURCES (CONTINUED)</b>				
<b>BIO-4b.7</b>	A biologist shall inspect unpaved access roads for the project annually for invasive exotic plant species as part of regular pipeline maintenance activities. If invasive exotic species are found, they shall be removed using the methods provided in the Revegetation Plan, or currently accepted methods. In addition, vehicles shall be washed or inspected by COMB after driving through areas with identified invasive exotic plant species infestations prior to using the vehicles elsewhere to prevent the spread of those invasive exotic plant species to other areas.	COMB	Specifications shall be included in the operations plan	Upon completion of construction	Responsible Party: COMB
<b>BIO-5</b>	Oak trees shall be avoided to the maximum extent feasible. Protections shall include financial incentives and penalties, and creation of exclusion zones. Trees that may be removed and those that must be protected shall be clearly shown on project plans and marked in the field. The construction plans and specifications shall include financial compensation to the construction contractor for avoiding oak trees that would be permitted to be removed and financial penalties for removing trees that are designated for protection. Financial compensation shall minimally be the estimated cost of mitigating loss of that tree (planting, monitoring, maintenance, and reporting to attain 10 trees that meet performance criteria for each tree removed). Financial penalties shall be minimally two times the compensation amount. Exclusion zones shall be created within the nominal construction easement to protect groups of trees where feasible.	COMB	Specifications shall be included in the final construction plans	Prior to and during construction	Responsible Party: COMB
	<b>CULTURAL RESOURCES</b>				
<b>CR-1</b>	Prior to construction, a Phase 2 significance evaluation shall be conducted at the archaeological site. Evaluation shall be designed to address the NRHP/CRHR eligibility of the site, in compliance with state and federal guidelines. If the site is found to be eligible for the NRHP/CRHR, then avoidance, through project redesign, shall be recommended. If avoidance is not feasible, then a Phase 3 data recovery excavation shall be conducted by a qualified archaeologist and Native American observer. Preconstruction meetings shall be conducted in order to inform construction personnel about common types of artifacts that may be uncovered during construction, the importance of cultural resources to archaeologists and Native Americans, and the reporting requirements and responsibilities of construction personnel. In addition, all ground disturbing construction activities on and adjacent to significant sites shall be monitored by a qualified archaeologist and Native American observer. In the unlikely event that unexpected archaeological resources are discovered during construction, all construction activities shall be halted in the area until the significance of the finding is evaluated by a qualified archaeologist.	COMB	Specifications shall be included in all construction and grading plans	Phase 2 significance evaluation prior to construction; avoidance during construction; Phase 3 data recovery evacuation prior to construction if avoidance is not feasible	Responsible Party: COMB

### South Coast Conduit/Upper Reach Reliability Project Mitigation Monitoring and Reporting Plan (continued)

<i>Mitigation Measure</i>	<i>Implementation Procedure or Action</i>	<i>Organization Responsible for Implementation</i>	<i>Reporting/ Notification Requirement</i>	<i>Compliance Schedule</i>	<i>Verification of Compliance</i>
<b>GEO-2</b>	<p style="text-align: center;">GEOLOGY AND SOILS</p> <p>The following erosion control protocol shall be followed in association with pipeline construction:</p> <ol style="list-style-type: none"> <li>Prior to any work beginning, a Stormwater Pollution Prevention Plan (SWPPP) for construction shall be prepared and submitted to the Regional Water Quality Control Board in compliance with the statewide General Construction Activity Stormwater Permit. This plan shall be designed for a 10-year, 8-hour duration storm event. Where possible, erosion control measures shall be installed prior to work beginning. Standard erosion and sediment control features as described in the Erosional Sediment Control Field Manual (California RWQCB 1999) shall be utilized during and immediately after grading to minimize short-term impacts associated with erosion and off-site siltation of West Fork and Glen Annie creeks.</li> <li>Prior to construction-related discharges, energy dissipation measures shall be installed at groundwater dewatering discharge points into West Fork and Glen Annie creeks to prevent erosion.</li> <li>Sedimentation basins (may be straw bales lined with filter fabric) shall be used for dewatering discharge points to prevent excess downstream sedimentation. These basins shall be constructed prior to dewatering and regularly maintained during construction, including after storm events, to remain in good working order.</li> <li>Straw bale/filter fabric barriers, backed by wire fencing for strength, shall be installed around spoil piles to contain sediment from runoff. These barriers shall be installed prior to any stockpiling during the rainy season or immediately after stockpiling during the dry season, and shall be regularly maintained, including during major rainfall events, until the stockpiles are completely removed.</li> <li>Subsequent to pipeline construction, erosion control matting shall be placed on disturbed slopes greater than 5:1 (20 percent), over seeding and mulching.</li> <li>Straw bale and/or filter fabric barriers shall be installed at the base of disturbed slopes, for a minimum of two months following slope completion (or until the end of the rainy season, whichever is longer), to reduce short-term erosion impacts prior to plant growth.</li> <li>During construction and on all disturbed slopes, water bars, filter fabric fencing, and/or rice wattles shall be placed at 50-foot (15-meter) intervals on slopes greater than 5:1 (20 percent).</li> </ol>	COMB/ Construction Contractor	COMB shall submit Notice of Intent to the RWQCB; contractor shall provide SWPPP to COMB; BMPs shall be located on the SWPPP/Erosion and Sediment Control Plan and grading and drainage plan; copy of the SWPPP/Erosion and Sediment Control Plan shall be maintained on the project site during grading and construction activities	Prior to construction	Responsible Party: COMB
<b>GEO-4.1</b>	A presentation by a County-qualified paleontologist explaining the potential for encountering paleontological resources during construction shall be included as an element of the project pre-construction meeting. Construction workers and other project personnel (including environmental monitors) shall be educated regarding the appearance of local paleontological resources, the proper notification channels in the event vertebrate fossils are encountered, as well as penalties for the illicit disturbance of such fossils.	COMB	County-qualified paleontologist shall conduct meeting	Prior to construction	Responsible Party: COMB

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<b>GEOLOGY AND SOILS (CONTINUED)</b>					
<b>GEO-4.2</b>	A County-qualified paleontological monitor shall be on call during excavation activities within the Vaqueros and Rincon formations.	COMB	Specifications shall be included in the final construction and grading plans, including location of Vaqueros and Rincon formations	Prior to construction; monitoring during construction	Responsible Party: COMB
<b>GEO-4.3</b>	In the event that vertebrate fossils are found by the monitor or construction personnel, the following actions shall be taken: 1. Follow appropriate notification procedures; 2. Assess the find and determine recovery procedures; 3. Provide for construction avoidance until the fossils are assessed and recovered, if appropriate; and 4. Continue paleontological monitoring while fossil assessment and/or recovery are being completed.	COMB	Specifications shall be included in all construction and grading plans	Prior to and during construction	Responsible Party: COMB
<b>HAZARDS AND HAZARDOUS MATERIALS</b>					
<b>HAZ-1</b>	A project-specific Storm Water Pollution Prevention Plan (SWPPP) shall be prepared and submitted to the RWQCB in compliance with the Statewide General Construction Activity Stormwater Permit, to prevent adverse impacts to nearby West Fork of Glen Annie and Glen Annie creeks associated with construction related incidental spills. This plan shall include, but not be limited to, a description of Best Management Practices (BMPs), including spill prevention measures, spill containment equipment, and monitoring requirements. The following pollution prevention measures shall be followed in association with pipeline construction: a) If rain occurs during or within three days after concrete is poured for any pipeline structures, plastic sheets or tarps shall be spread and secured over the concrete in such a manner to prevent rain from coming in contact with the concrete; b) Concrete trucks shall be washed out in a designated area where the material cannot run off into the stream or percolate into the groundwater. This area shall be specified on all applicable construction plans and be in place before any concrete is poured;	COMB/ Construction Contractor	COMB shall submit Notice of Intent to the RWQCB; contractor shall provide SWPPP to COMB; BMPs shall be located on the SWPPP grading/drainage plan; copy of the SWPPP shall be maintained on the project site during grading and construction activities;	Prior to issuance of grading permits	Responsible Party: COMB

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	<b>HAZARDS AND HAZARDOUS MATERIALS (CONTINUED)</b>				
<b>HAZ-1 (cont.)</b>	<p>c) Upon entering the site and regularly thereafter, equipment shall be inspected and maintained prior to working in or immediately adjacent to West Fork of Glen Annie or Glen Annie creeks. Any leaks or hoses/fittings in poor condition shall be repaired before the equipment begins work; and</p> <p>d) A Hazardous Materials Business Plan shall be prepared prior to equipment use on the site and followed for project construction. This plan shall include, but not necessarily be limited to:</p> <ol style="list-style-type: none"> <li>1. Specific bermed equipment maintenance and refueling areas;</li> <li>2. Bermed and lined hazardous material storage areas on site that are covered during the rainy season;</li> <li>3. Hazardous material spill cleanup equipment on site (e.g., sorbent pads, shovels, and bags to place contaminated soil in); and</li> </ol> <p><b>Workers trained in location and use of cleanup equipment.</b></p>		Hazardous Materials Business Plan shall be reviewed and approved by COMB	Prior to issuance of grading permits	Responsible Party: COMB
	<b>NOISE</b>				
<b>NOISE-1.1</b>	Construction activity within 800 feet (244 meters) of the residences shall be limited to the hours of 7 A.M. to 5 P.M., Monday through Saturday. No construction shall occur on state Holidays (e.g., Thanksgiving, Christmas, 4 <sup>th</sup> of July, Labor Day). Construction equipment maintenance shall be limited to the same hours. Non-noise generating construction activities are not subject to these restrictions.	COMB	Specifications shall be included on the construction plans	Prior to and during construction	Responsible Party: COMB
<b>NOISE-1.2</b>	COMB shall notify the sensitive noise receptors 48 hours in advance of the commencement of any and all construction activities. The construction manager's (or representative's) telephone number shall also be provided with the notification so that concerns can be communicated.	COMB	Specifications shall be included on the construction plans	Prior to and during construction	Responsible Party: COMB
<b>NOISE-1.3</b>	Stockpiling and vehicle staging areas shall be located as far as practical from sensitive noise receptors. Every effort shall be made to create the greatest distance between noise sources and sensitive receptors during construction activities.	COMB	Specifications shall be included on the construction plans	Prior to and during construction	Responsible Party: COMB
	<b>TRANSPORTATION AND CIRCULATION</b>				
<b>TRANS-3</b>	Damage caused by the Project to the Glen Annie Road segment located north of the Glen Annie Road/Cathedral Oaks Road intersection shall be repaired.	COMB/ Construction Contractor	Repair requirements shall be in contractor bid solicitation package and included in contractor's scope of work	Prior to and during construction	Responsible Party: COMB