

COUNTY OF SANTA BARBARA

Department of Public Works

Flood Control & Water Conservation District

**Final Mitigated Negative Declaration**

**Mission Creek Debris Basin Storm Drain**

16NGD-00000-00007

SCH NO. 2016051022

**June 15, 2016**



**PROJECT PROPONENT:**

Santa Barbara County Flood Control & Water Conservation District

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## **1.0 INTRODUCTION**

### **1.1 PURPOSE AND LEGAL AUTHORITY**

The California Environmental Quality Act (CEQA) requires that local, regional, and state agencies and special purpose districts prepare an Initial Study to identify potential environmental impacts associated with discretionary actions. An Initial Study is generally used to determine if significant impacts would occur, and to determine the need for preparation of either a Negative Declaration or further analysis in an EIR. The Santa Barbara County Flood Control & Water Conservation District (District) has prepared this Initial Study for a proposed new storm drain to comply with the provisions of CEQA.

### **1.2 PROJECT PROPONENT**

Santa Barbara County Flood Control District  
130 E. Victoria Street, Suite 200  
Santa Barbara, California 93101  
Contact: Ms. Maureen Spencer - 805/568-3440

### **1.3 PROJECT BACKGROUND**

A private party constructed a private storm drain pipe in Orange Grove Avenue (a private roadway) which currently terminates near the intersection with Tunnel Road, a public roadway. The purpose of this project is to construct a storm drain pipe to connect the terminus of the private storm drain to Mission Creek.

### **1.4 PROJECT LOCATION**

The project is located at the Orange Grove Avenue/Tunnel Road intersection in unincorporated Santa Barbara County (N34.46284°/W119.71154°) (see Figures 1 and 2). The point where the storm drain would empty into Mission Creek is located approximately 1.1 miles upstream of the Route 192 crossing. Mission Creek is an intermittent stream that drains the Santa Ynez Mountains.

### **1.5 PROJECT OBJECTIVES**

The objective of the project is to direct storm flows from the storm drain along southern Orange Grove Avenue and other storm drains west of Tunnel Road to Mission Creek to address potential flooding of Tunnel Road and the southern portion of Orange Grove Avenue.

### Site Information Table

Comprehensive Plan Designation	Mission Canyon Community Plan Area, Comprehensive Plan designation RES-1.0; First Supervisorial District
Zoning District, Ordinance	Santa Barbara County Land Use and Development Code; zoned 1-E-1; Environmentally Sensitive Habitat and Flood Hazard overlays
Site Size	Approximately 0.25 acres, including the buried and above-ground storm drain segments and construction work area
Present Use & Development	Santa Barbara County public road right-of-way, flood control channel
Surrounding Uses/Zoning	North: single-family residential, zone 1-E-1
	South: single-family residential, zoned 1-E-1
	East: single-family residential, zoned RR-5 (residential ranchette)
	West: single-family residential, zoned 1-E-1
Access	Tunnel Road
Public Services	Water Supply: City of Santa Barbara (Cachuma Project)
	Sewage: City of Santa Barbara (El Estero Treatment Plant)
	Fire: Santa Barbara County Fire Department (Station 15)
	Police: Santa Barbara County Sheriff

## 1.6 PROJECT APPROVALS AND PERMITS

Project implementation may require the District to obtain permits and/or other forms of approval from Federal and State agencies. These agencies may include, but are not limited to, the following:

### 1.6.1 Federal Agencies

- U.S. Army Corps of Engineers - Clean Water Act Section 404 permit required for placement of the storm drain within Mission Creek (if pipe placement results in discharge of fill).

### 1.6.2 State Agencies

- Department of Fish and Wildlife - Streambed Alteration Agreement for work within Mission Creek.
- Regional Water Quality Control Board - 401 Water Quality Certification (associated with Corps permit).
- Regional Water Quality Control Board – coverage under the construction storm water discharge general permit.

### 1.6.3 Local Agencies

- Santa Barbara County Public Works, Transportation – roadway encroachment permit.



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## 1.7 PUBLIC COMMENTS

In compliance with Section 15073 of the State Guidelines for the Implementation of the California Environmental Quality Act, the Santa Barbara County Flood Control & Water Conservation District accepted written comments on the adequacy of the information contained in the Draft MND during the public review period ending June 9, 2016.

Comment letters were received from the following parties:

- Ron & Sally Burns, 1407 Tunnel Road, Santa Barbara;
- Howard B. Schiffer, Mission Canyon, Santa Barbara;
- U.S. Fish and Wildlife Service; and
- Santa Barbara County Air Pollution Control District;

Section 15074(b) of the State Guidelines for the Implementation of the California Environmental Quality Act, requires the decision-making body to consider comments received on the MND when approving the project. Copies of the comment letters and full responses are provided as Appendix A. Changes to the Draft MND are provided in underline and strike-out mode.

## **2.0 PROJECT DESCRIPTION**

### **2.1 PROJECT CHARACTERISTICS**

The project involves a new storm drain connecting an existing storm drain outlet near the Orange Grove Avenue/Tunnel Road intersection to Mission Creek. Project components include (see Figure 3):

1. Approximately 20 feet of 18-inch diameter buried high-density polyethylene pipe (HDPE) or reinforced concrete pipe (RCP) from the existing storm drain in Orange Grove Avenue (see site location in Figure 2.a) to a proposed storm drain manhole (see component 3);
2. Approximately 212 feet of 24-inch diameter buried HDPE pipe (or RCP) from the proposed manhole in Orange Grove Avenue to a proposed storm drain drop inlet on the eastern shoulder of Tunnel Road (see alignment along Tunnel Road in Figures 2.b and 2.c);
3. Five new buried storm drain manhole structures (with flush cast iron cover), one in Orange Grove Avenue and four in Tunnel Road;
4. Two new smaller storm drains (18-inch diameter HDPE pipe or RCP) buried under Tunnel Road to connect existing inlets on the road shoulder to the proposed storm drain; and
5. Approximately 92 feet of 24-inch diameter above-ground corrugated metal pipe (CMP) connecting the proposed storm drain drop inlet (see component 2) to the existing grouted rock rip-rap on the Mission Creek Debris Basin embankment (see alignment in Figure 2.d).

The above-ground CMP would traverse the slope east of Tunnel Road, and secured to the slope using a cable anchoring system. The terminus of the CMP outfall would be laid on a pre-cast concrete cradle secured to the grouted rock rip-rap embankment, and fitted with a flared end-piece to disperse storm flow.

### **2.2 CONSTRUCTION METHODS**

#### **2.2.1 Buried Storm Drain Pipe and Structure Construction**

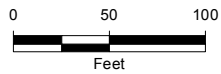
Trenches would be excavated along Tunnel Road and Orange Grove Avenue and the HDPE pipe laid in the trench on bedding material. Depending on pipe depth, the trenches would be shored by the construction contractor in compliance with Occupational Safety & Health Administration requirements. The trench would be filled with backfill material to subgrade and backfill material compacted. All affected pavement would be replaced over the trench. Excavation would be conducted to accommodate the manholes and drop inlet, and the open excavation would be shored by the contractor as needed. Pre-cast concrete structures (manholes and drop inlet) would be placed in the excavation, or the structures would be cast-in-place. The excavation would be backfilled around the structures, and the roadway surface restored.



**LEGEND:**

- Proposed Buried Storm Drain
- Proposed Above Ground Storm Drain
- Mission Creek

Source: Esri Online Imagery Basemap  
 Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet  
 Notes: This map was created for informational and display purposes only.

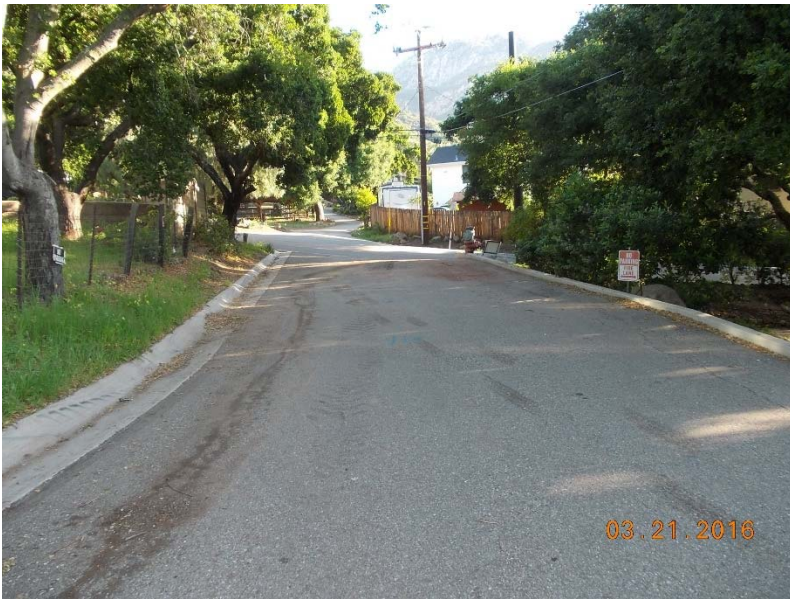


PROJECT NAME: MISSION CANYON STORM DRAIN SANTA BARBARA COUNTY, CA	
PROJECT NUMBER: 1602-0791	DATE: March 2016

**SITE PLAN**

FIGURE  
1

BACK OF COLOR FIGURE



a. Storm drain connection in Orange Grove Avenue near Tunnel Road



b. Upper Tunnel Road storm drain alignment

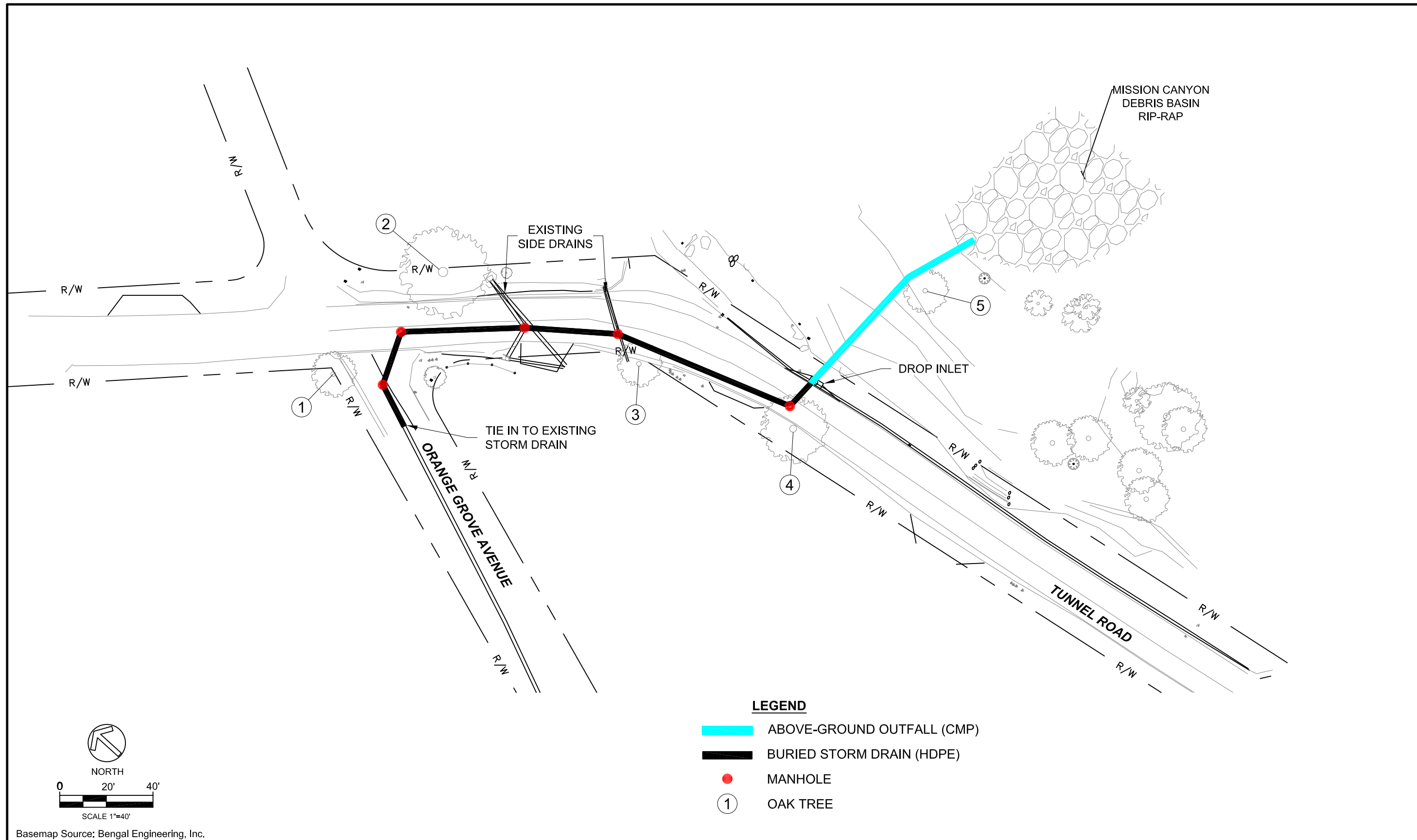


c. Lower Tunnel Road storm drain alignment, note power pole



d. Slope storm drain alignment, power pole to rock rip-rap in foreground

BACK OF COLOR FIGURE



Basemap Source: Bengal Engineering, Inc.

## 2.2.2 CMP Storm Drain Outfall Construction

Once the precise alignment for the storm drain outfall on the slope is determined, a very small amount of excavation and fill (using hand tools) may be required on the slope to provide a level area for the CMP outfall to sit. A cable stay anchorage system would be installed to secure the above-ground CMP outfall to the slope. This would consist of two 4 or 6 inch diameter vertical steel pipes with concrete footings located at the top of the slope, with cable attachments fixed to a steel collar attached to the CMP on the slope. Additional cable anchors or an alternative cable anchorage system may be required. Such an alternative system may involve a steel rod pneumatically placed into the slope with a handheld jack hammer and cables secured at the top of the slope and to the pipe collars. Construction workers would wear harnesses secured to the top of the slope with equipment lowered to them. The end of the storm drain outfall would be secured to the existing grouted rock rip-rap using a pre-cast concrete cradle, which would be fixed to the existing rock using bolts or equivalent.

## 2.2.3 Construction Equipment

Equipment used for construction may include a backhoe, trench shoring plates, wheeled loaders, dump trucks, debris bins, flatbed trucks with and without cranes, air compressors, jackhammers, cutting torches, and saws.

## 2.2.4 Staging Areas and Easements

Construction contractor equipment would be staged adjacent to the Mission Creek Debris Basin or off-site at a contractor owned or leased yard. Earth material excavated for the buried pipe and structures would be temporarily stored along Tunnel Road and/or adjacent to the Mission Creek Debris Basin.

A temporary construction easement may be required for work on private property within or adjacent to Orange Grove Avenue (APN 023-032-001).

## 2.2.5 Construction Schedule and Timing

Construction is currently scheduled to start in July 2016 and is estimated to take approximately 8 to 10 weeks to complete.



### **3.0 ENVIRONMENTAL SETTING**

#### **3.1 AFFECTED PARCELS**

The proposed new buried storm drain and structures would be located within the existing County roadway right-of-way (40 feet wide) along Tunnel Road. If required, the storm drain extension to Orange Grove Avenue would extend beyond the Tunnel Road right-of-way onto private property (APN 023-032-001).

The proposed above-ground storm drain outfall would be located on APN 023-033-005 (2.24 acres) owned by Santa Barbara County. At the project site, parcels west of Mission Creek are zoned 1-E-1 (One-Family Residential) and parcels east of Mission Creek are zoned RR-5 (residential ranchette). Affected parcels are subject to the County's Mission Canyon Community Plan.

#### **3.2 EXISTING LAND USE**

Land uses surrounding the project site are single-family residential, excluding the Mission Creek Debris Basin, a flood control facility. Mission Creek is relatively undisturbed near the project site, excluding the earthen Debris Basin and grouted rock rip-rap embankment.

#### **3.3 SITE CHARACTERISTICS**

The project site is located in Mission Canyon within the southern foothills of the Santa Ynez Mountains. The site is underlain by intermediate alluvial deposits (Upper Pleistocene), with active channel alluvium in Mission Creek (Dibblee, 1986).

The Mission Creek watershed extends approximately 7.5 miles from the Santa Ynez Mountains to the ocean and covers approximately 7,400 acres. The National Forest encompasses 47 percent of the overall watershed. The main stem of Mission Creek extends from near La Cumbre Peak at the crest of the Santa Ynez Mountains south to the Pacific Ocean. Mission Creek has two primary tributaries; Las Canoas Creek and Rattlesnake Creek, which converge near Foothill Road (Route 192). Rattlesnake Creek forms about 27 percent of the watershed area.

Mission Creek winds its way through highly urbanized areas until it reaches the ocean east of Stearns Wharf. The tidal Mission Creek Lagoon at the creek mouth extends from just east of Stearns Wharf to Yanonali Street, approximately 2,100 feet upstream from the bottom of the lagoon. The size of the lagoon is dependent on the state of the sand berm restricting flow to the ocean, rainfall, and tides.

The middle portion of the watershed, upstream of State Street, is low-density residential. Upper Mission, Rattlesnake, and Las Canoas Creeks flow through residential and rural areas and open space lands. Above the Botanic Garden in Mission Canyon, there are few residences, mostly on medium to large lots along Mission Canyon Road. The upper reaches occur in a canyon landform and have relatively steep creek gradients. Most of the watersheds of these creeks are comprised of Rincon Shale, and sandstones and shales of the Sespe Formation, although older alluvial creek terraces and cobble-boulder conglomerate deposits are also common along the creek.

A portion of Mission Creek is maintained by the District, beginning at Cabrillo Boulevard and extending to the Mission Creek Debris Basin. The Mission Creek corridor (including the project site) has been designated as an Environmentally Sensitive Habitat Area under the County's Mission Canyon Community Plan.

### **3.4 OTHER PENDING AND APPROVED DEVELOPMENT**

Section 15355 of the State CEQA Guidelines states that "cumulative impacts refers to two or more individual effects which when considered together are considerable or which compound or increase other environmental impacts." Further, "the individual effects may be changes resulting from a single project or a number of separate projects", and "the cumulative impact from several projects is 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 probable future projects." "Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

#### **3.4.1 Santa Barbara County**

The following is a list of projects recently approved or under review by the County's Planning and Development Department located within the planning areas of the Mission Canyon Community Plan and Montecito Community Plan:

- 1049 Tunnel Road: detached carport with solar panels (under review).
- Santa Barbara Botanic Garden (revisions to the approved development plan): new conservation center, parking lot, driveway and infrastructure (under review).
- Westmont College Master Plan: 314,500 square feet of new buildings (under construction).
- Mozart Greenhouses: two 192 square foot greenhouses (approved).
- Garner Lot Split: split one parcel into two parcels (approved).
- Crane School Master Plan: 40,000 square feet of new buildings (approved).
- Loiacono Lot Split: split one 8.31 acre parcel into two buildable parcels (approved).
- Montecito YMCA Master Plan: re-development of existing facilities and addition of a 19,954 square foot gym (under review);
- Casa Dorinda Master Plan Update: 20 retirement residential units, 45,000 square feet of commercial land uses (under review).

### 3.4.2 City of Santa Barbara

The following is a list of City bridge replacement projects on lower Mission Creek that may contribute to cumulative impacts:

- Anapamu Street Bridge over Mission Creek (under review, construction scheduled to begin in 2017).
- De la Guerra Street Bridge over Mission Creek (under review, construction scheduled to begin in 2018).
- Gutierrez Street Bridge over Mission Creek (under review, construction scheduled to begin in 2017).
- Mason Street Bridge over Mission Creek (under construction).
- Cabrillo Street Bridge over Mission Creek (under construction).

#### 4.0 POTENTIALLY SIGNIFICANT EFFECTS CHECKLIST

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

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

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

**Less than Significant Impact:** An impact is considered adverse but does not exceed a significance threshold.

**No Impact:** There is adequate supporting documentation that the impact does not apply to the subject project.

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

#### 4.1 AESTHETICS/VISUAL RESOURCES

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

#### Setting:

The project site is located in an area designated as “moderate” scenic value by the Open Space Element of the Santa Barbara County Comprehensive Plan. State Route 154 is located approximately three miles west of the project site and is a designated State scenic highway, and a scenic corridor. The project site is not visible from State Route 154 due to distance and intervening topography. Views of the project site are limited to motorists on Tunnel Road and Orange Grove Avenue. Tunnel Road and Mission Canyon Road are considered a major view corridors within Mission Canyon in the Mission Canyon Community Plan. Views of the project site from Mission Canyon Road are obscured by vegetation.

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

**Impact Discussion:**

- a. Less than Significant Impact:** There are no designated scenic vistas in the project area. However, Tunnel Road is considered a view corridor and project-related construction activities (heavy equipment, materials) would be visible to the public using this roadway. Impacts to the view corridor are considered less than significant because an aesthetically offensive site would not be created and the small scale of the project (up to 200 feet of trenches) and short duration (a few months) would limit impacts. No long-term impacts would occur as the above-ground storm drain outfall would not be visible to the public using Tunnel Road or Mission Canyon Road, due to intervening vegetation and/or topography.
- b. Less than Significant Impact:** As discussed in a. above, impacts would be limited in magnitude and short-term (construction-related). No long-term impacts would occur. Therefore, changes to the visual character of the area would be less than significant.
- c. Less than Significant Impact:** Project-related construction activities would not require night lighting. The above-ground storm drain outfall would not be highly reflective and would be located below the roadway grade. Therefore, significant glare is not anticipated.
- d. No Impact:** The above-ground storm drain outfall would not be visible to the public using Tunnel Road or Mission Canyon Road. In any case, the storm drain outfall is similar to culvert systems used in mountainous areas (such as along Route 154) and would not be visually incompatible.

**Mitigation and Residual Impact:**

No significant impacts were identified; therefore, mitigation is not required. The project would not result in a cumulatively considerable contribution to cumulative aesthetics impacts.

**4.2 AGRICULTURAL RESOURCES**

<b>Will the proposal result in:</b>	<b>Potentially Significant</b>	<b>Less than Significant with Mitigation</b>	<b>Less than Significant</b>	<b>No Impact</b>	<b>Reviewed Under Previous Document</b>
<b>a.</b> Convert prime agricultural land to non-agricultural use, impair agricultural land productivity (whether prime or non-prime) or conflict with agricultural preserve programs?				X	
<b>b.</b> An effect upon any unique or other farmland of State or Local Importance?				X	

**Setting:**

An Important Farmland map for the project area was obtained from the California Department of Conservation. Orchards designated as Unique farmland are located approximately 350 feet east of the Mission Creek Debris Basin. No other farmland is located in the immediate project area.

Agricultural lands play a critical economic and environmental role in Santa Barbara County. Agriculture continues to be Santa Barbara County's major producing industry with a gross production value of over \$1.5 billion (Santa Barbara County 2014 Agricultural Production Report). In addition to the creation of food, jobs, and economic value, farmland provides valuable open space and maintains the County's rural character.

**Impact Discussion:**

- a. **No impact:** The project would not involve the conversion of agricultural lands, or conflict with existing agricultural uses or preserve programs.
- b. **No impact:** The proposed project would not affect Unique farmland or farmland of State or Local Importance.

**Mitigation and Residual Impact:**

No impacts were identified; therefore, mitigation is not required. The project would not result in impacts to agricultural resources or contribute to cumulative impacts.

**4.3 AIR QUALITY**

<b>Will the proposal result in:</b>	<b>Potentially Significant</b>	<b>Less than Significant with Mitigation</b>	<b>Less than Significant</b>	<b>No Impact</b>	<b>Reviewed Under Previous Document</b>
a. The violation of any ambient air quality standard, a substantial contribution to an existing or projected air quality violation including, CO hotspots, or exposure of sensitive receptors to substantial pollutant concentrations (emissions from direct, indirect, mobile and stationary sources)?			X		
b. The creation of objectionable smoke, ash or odors?			X		
c. Extensive dust generation?			X		
<b>Greenhouse Gas Emissions</b>					
d. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X		
e. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X		

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**Setting:**

**Background.** The project site is located in Santa Barbara County within the South Central Coast Air Basin (SCCAB) which encompasses three counties: San Luis Obispo, Santa Barbara and Ventura. The Santa Barbara County portion of the SCCAB periodically fails to meet air quality standards and has been designated a “non-attainment” area for the State 8-hour ozone standard and State particulate matter (PM<sub>10</sub>) standard. On April 30, 2012, Santa Barbara County was designated unclassifiable/attainment for the 2008 Federal 8-hour ozone standard (the 1-hour Federal ozone standard was revoked for Santa Barbara County). The County is also considered in attainment for the State 1-hour standard for ozone as of June 2007. Ambient air quality monitoring indicates the County routinely exceeds the California 8-hour ozone standard and the California standard for PM<sub>10</sub>. The County is unclassifiable/attainment for the Federal PM<sub>2.5</sub> standard and unclassified for the California PM<sub>2.5</sub> standard (based on monitored data from 2007 to 2009).

Air pollution control is administered on three governmental levels. The U.S. Environmental Protection Agency (EPA) has jurisdiction under the Clean Air Act, the California Air Resources Board (CARB) has jurisdiction under the California Health and Safety Code and the California Clean Air Act, and the Santa Barbara County Air Quality Pollution District (SBCAPCD) shares responsibility with the CARB for ensuring that all State and Federal ambient air quality standards are attained within the Santa Barbara County portion of the SCCAB.

The Santa Barbara County APCD and Santa Barbara County Association of Governments adopted the 2010 Clean Air Plan in January 2011, which was prepared to address the requirements of the California Clean Air Act. The 2010 Clean Air Plan provides an update to the County’s emission inventory, and all feasible measures to reduce emissions of ozone precursors by at least 5 percent per year. A 2013 Clean Air Plan was adopted on March 19, 2015 as a triennial update to the 2010 Clean Air Plan and indicates air quality is improving, and strategies for further air pollutant emissions reductions are focused on mobile sources, particularly marine shipping.

Overall, air quality in Santa Barbara County is improving, as the number of County exceedances of the State 1-hour ozone standard has declined from 37 days in 1990 to three days or less in recent years.

The closest air quality monitoring station and most representative of the project site is the Santa Barbara station, located 2.6 miles to the south-southeast of the project site. A summary of air quality standard exceedances recorded at this air quality monitoring station is provided in Table 1.

**Table 1. Summary of Ambient Air Quality Data**

Pollutant	2012	2013	2014
<b>Ozone</b>			
Highest 1-Hour concentration (ppm)	0.071	0.072	0.099
Highest 8-Hour concentration (ppm)	0.058	0.062	0.077
Number of State Exceedances (8-Hour>0.070 ppm)	0	0	3
Number of Federal Exceedances (8-Hour>0.075 ppm)	0	0	1
<b>Particulate Matter less than 10 microns (PM<sub>10</sub>)</b>			
Highest Sample (micrograms/cubic meter)	58.7	61.0	55.8
Number of State Exceedances (Samples>50)	1	3	3
<b>Particulate Matter less than 2.5 microns (PM<sub>2.5</sub>)</b>			
Highest Sample (micrograms/cubic meter)	31.0	19.8	24.1
Number of Federal Exceedances (Samples>35)	0	0	0

Greenhouse gases (GHGs) are defined as any gas that absorbs infrared radiation in the atmosphere. GHGs include, but are not limited to, water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). These greenhouse gases lead to the trapping and buildup of heat in the atmosphere near the earth's surface, commonly known as the Greenhouse Effect. There is increasing evidence that the Greenhouse Effect is leading to global warming and climate change.

Following Executive Order S-3-05 in June 2005, which declared California's particular vulnerability to climate change, the California Global Warming Solutions Act of 2006 (AB 32) was signed by Governor Arnold Schwarzenegger on September 27, 2006. In response to global warming, AB 32 requires the CARB to adopt a statewide greenhouse gas emissions limit equivalent to the statewide GHG emissions levels in 1990 to be achieved by 2020 and requires the CARB to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. CARB developed a Draft Scoping Plan for Climate Change in 2008, and proposed a comprehensive set of actions designed to reduce overall carbon emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, and enhance public health while creating new jobs and enhancing the growth in California's economy.



The First Update to the Scoping Plan was approved by the CARB on May 22, 2014, and builds upon the initial Scoping Plan with new strategies and recommendations to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First Update defines CARB's climate change priorities for the next five years, and also sets the groundwork to reach long-term goals set forth in Executive Orders S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use.

Santa Barbara County completed the first phase (Climate Action Study) of its climate action strategy in September 2011. The Climate Action Study provides a County-wide GHG inventory and an evaluation of potential emission reduction measures. The second phase of the County's climate action strategy is an Energy and Climate Action Plan (ECAP), which was adopted by the County Board of Supervisors in May 2015. The ECAP meets the criteria in CEQA Guidelines Section 15183.5(b) for a "plan to reduce GHG emissions." The ECAP commits the County to reduce community-wide GHG emissions by 15 percent below 2007 levels by 2020 consistent with the California Global Warming Solutions Act of 2006 (AB 32) and CARB's Scoping Plan. The ECAP includes specific local measures that will help meet this emission reduction target. Concurrent with the ECAP, the Board of Supervisors also adopted an amendment to the Energy Element of the Comprehensive Plan that requires the County to monitor progress meeting the emission reduction target and, as necessary, update the ECAP.

**Air Pollutant Thresholds.** The Santa Barbara County Planning and Development Department (2015) has developed the following thresholds to determine the significance of long-term air emissions under the California Environmental Quality Act.

- Project emissions (mobile and stationary sources) greater than the daily trigger for offsets of 55 pounds per day for NO<sub>x</sub> and ROC, and 80 pounds per day for PM<sub>10</sub>,
- Emit more ~~less~~ than 25 pounds per day of NO<sub>x</sub> or ROC from motor vehicle trips;
- Cause or contribute to a violation of any California or National ambient air quality standard (except ozone);
- Exceed the health risk public notification thresholds of the APCD; and
- Be inconsistent with the adopted 2013 Clean Air Plan.

No thresholds have been established for short-term impacts associated with construction activities. However, the County's Grading Ordinance requires standard dust control conditions for all projects involving grading activities. Long-term/operational emissions thresholds have been established to address mobile emissions (i.e., motor vehicle emissions) and stationary source emissions (i.e., stationary boilers, engines, paints, solvents, and chemical or industrial processing operations that release pollutants).

**Greenhouse Gas Thresholds.** CEQA Guidelines Section 15183.5(a) states:

*Lead agencies may analyze and mitigate the significant effects of GHG emissions at a programmatic level, such as in...a separate plan to reduce GHG emissions. Later project-specific environmental documents may tier from...that existing programmatic review...a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan...*

The ECAP includes a GHG emissions inventory and forecast for unincorporated Santa Barbara County to 2020. The growth estimates used in the emissions forecast came from the Santa Barbara County Regional Growth Forecast 2005-2040 and incorporated 2010 U.S. Census data where available. The GHG emissions forecast is based on factors such as population projections, vehicle trends, and planned land uses.

The sources of GHG emissions included various sectors, such as transportation, residential energy, commercial energy, off-road, solid waste, agriculture, water and wastewater, industrial energy, and aircraft. As a result, most residential and commercial projects that are consistent with the County's zoning (in 2007) were included in the forecast. However, certain projects were not included in the emissions forecast, such as stationary source projects (e.g., large boilers, gas stations, auto body shops, dry cleaners, oil and gas production facilities, and water treatment facilities), Comprehensive Plan amendments, and community plans that exceed the County's projected population and job growth.

Santa Barbara County adopted a GHG emissions threshold of significance in 2015 for industrial stationary sources of air pollution. The significance of impacts from other GHG sources is based on the ECAP's emissions forecast, and tiers from the ECAP's EIR for its CEQA analysis of GHG emissions. A project that tiers from the ECAP's EIR is considered to be in compliance with the requirements in the ECAP and, therefore, its incremental contribution to a cumulative effect is not cumulatively considerable (Class III).

**Impact Discussion:**

**a-c. Potential Air Quality Impacts**

**Short-Term Construction Emissions - Less than Significant Impact:** The proposed project would generate air pollutant emissions as a result of construction activities; primarily exhaust emissions from heavy-duty trucks, worker vehicles and heavy equipment. Emissions were estimated for a peak day, composing of trenching activities. It was assumed that 2 truck trips (4 one-way trips) and 4 worker trips (8 one-way trips) would occur on a peak work day. Estimated project peak day emissions are listed in Table 2. Due to their small magnitude and duration, project emissions are considered a less than significant air quality impact.

**Table 2. Construction Air Pollutant Emissions**

Source	Pollutant, Pounds per Peak Day			
	ROC	NO <sub>x</sub>	CO	PM <sub>10</sub>
Equipment exhaust	1.2	8.1	8.1	0.5
On-road vehicles	0.1	0.8	1.0	<0.1
Fugitive dust	0.0	0.0	0.0	17.8
<b>Total</b>	1.3	8.9	9.1	18.3

Construction-related earthwork at the project site would not have the potential to result in significant project-specific short-term emissions of fugitive dust and PM<sub>10</sub>, with the implementation of standard dust control measures that are required by the Grading Ordinance for all new development in the County (see below).

Emissions of ozone precursors (NO<sub>x</sub> and ROC) during project construction would result primarily from the on-site use of heavy equipment. Due to the limited period of time that heavy equipment operation would occur on the project site, construction-related emissions of NO<sub>x</sub> and ROC would not be significant on a project-specific or cumulative basis. However, to facilitate attainment of the State 8-hour ozone standard in the Santa Barbara County portion of the SCCAB, the project should implement measures recommended by the SBCAPCD (see below) to reduce construction-related emissions of ozone precursors to the extent feasible. Compliance with these measures is routinely required for all new development in the County.

**Dust Control Measures.** The Contractor shall comply with the following dust control components at all times including weekends and holidays:

- Dust generated by the development activities shall be kept to a minimum with a goal of retaining dust on the site.
- During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, use water trucks or sprinkler systems to prevent dust from leaving the site and to create a crust after each day's activities cease.
- During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. Reclaimed water shall be used if feasible.
- Wet down the construction area after work is completed for the day and whenever wind exceeds 15 mph.
- When wind exceeds 15 mph, have site watered at least once each day including weekends and/or holidays.
- Order increased watering as necessary to prevent transport of dust off-site.
- Cover soil stockpiled for more than two days or treat with soil binders to prevent dust generation. Reapply as needed.

- If the site is graded and left undeveloped for over four weeks, the Contractor shall immediately seed and water to re-vegetate graded areas; and/or spread soil binders; and/or employ any other method(s) deemed appropriate by Public Works or APCD.

**Diesel Emissions Control Measures.** The Contractor shall comply with the following diesel emission reduction strategies at all times during construction activities:

- All portable diesel-powered construction equipment shall be registered with the state's portable equipment registration program OR shall obtain an APCD permit.
- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, § 2449), the purpose of which is to reduce diesel particulate matter and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles.
- All commercial diesel vehicles are subject to Title 13, § 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.
- Diesel construction equipment meeting the CARB Tier 1 emission standards for off-road heavy-duty diesel engines shall be used. Equipment meeting CARB Tier 2 or higher emission standards should be used to the maximum extent feasible.
- Diesel powered equipment should be replaced by electric equipment whenever feasible.
- If feasible, diesel construction equipment shall be equipped with selective catalytic reduction systems, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or CARB.
- Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
- All construction equipment shall be maintained in tune per the manufacturer's specifications.
- The engine size of construction equipment shall be the minimum practical size.
- The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
- Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.

**Long-Term Operation Emissions.** The proposed project is comprised of a new storm drain and would not directly generate air pollutant emissions. Regular maintenance of the proposed storm drain would not be required; therefore, emissions generated by maintenance vehicles would not occur. Therefore, the proposed project would not have any long-term air quality impacts.

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

**d-e. Greenhouse Gas Emissions/Global Climate Change - Less than Significant Impact:** Equipment and vehicles used to construct the new storm drain would emit approximately 36.3 metric tons of GHGs (CO<sub>2</sub>e), and may contribute to global climate change. Emissions of heavy equipment to be used to construct the project were included in the Off-road sector of the County’s GHG inventory and forecast, and vehicle emissions (materials and worker transportation) were included in the Transportation sector of the forecast. Since the project’s GHG emissions were included in the ECAP’s GHG emissions forecast and subject to measures to reduce these emissions, its incremental contribution to a cumulative effect is not cumulatively considerable (Class III).

**Mitigation and Residual Impact:**

No significant impacts were identified; therefore, mitigation is not required. Residual impacts would be less than significant.

**4.4 BIOLOGICAL RESOURCES**

<b>Will the proposal result in:</b>	<b>Potentially Significant</b>	<b>Less than Significant with Mitigation</b>	<b>Less than Significant</b>	<b>No Impact</b>	<b>Reviewed Under Previous Document</b>
<b>Flora</b>					
<b>a.</b> A loss or disturbance to a unique, rare or threatened plant community?				X	
<b>b.</b> A reduction in the numbers or restriction in the range of any unique, rare or threatened species of plants?				X	
<b>c.</b> A reduction in the extent, diversity, or quality of native vegetation (including brush removal for fire prevention and flood control improvements)?			X		
<b>d.</b> An impact on non-native vegetation whether naturalized or horticultural if of habitat value?			X		
<b>e.</b> The loss of healthy native specimen trees?			X		

<b>Will the proposal result in:</b>	<b>Potentially Significant</b>	<b>Less than Significant with Mitigation</b>	<b>Less than Significant</b>	<b>No Impact</b>	<b>Reviewed Under Previous Document</b>
<b>f.</b> Introduction of herbicides, pesticides, animal life, human habitation, non-native plants or other factors that would change or hamper the existing habitat?				X	
<b>Fauna</b>					
<b>g.</b> A reduction in the numbers, a restriction in the range, or an impact to the critical habitat of any unique, rare, threatened or endangered species of animals?		X			
<b>h.</b> A reduction in the diversity or numbers of animals onsite (including mammals, birds, reptiles, amphibians, fish or invertebrates)?			X		
<b>i.</b> A deterioration of existing fish or wildlife habitat (for foraging, breeding, roosting, nesting, etc.)?			X		
<b>j.</b> Introduction of barriers to movement of any resident or migratory fish or wildlife species?			X		
<b>k.</b> Introduction of any factors (light, fencing, noise, human presence and/or domestic animals) which could hinder the normal activities of wildlife?			X		

**Setting:**

**Vegetation.** The Mission Canyon Community Plan identifies four general vegetation types in Mission Canyon, including riparian forest, coast live oak woodland, chaparral and California sagebrush scrub. Figure 18 of the Mission Canyon Community Plan identifies “Developed Coast Live Oak Woodland” along Tunnel Road at the project site and “Central Coast Live Oak Riparian Forest” along Mission Creek at the Debris Basin.

Vegetation along the storm drain alignment within Orange Grove Avenue and Tunnel Road is limited to landscaping; however, several coast live oak trees have been retained on properties along Tunnel Road (see Table 5).

A field survey was conducted to identify plant communities in the vicinity of the proposed storm drain outfall in Mission Canyon. California sycamore woodland occurs immediately upstream of the Debris Basin, and is dominated by western sycamore (*Platanus racemosa*), white alder (*Alnus rhombifolia*), arroyo willow (*Salix lasiolepis*) and California bay-laurel (*Umbellularia californica*). The Debris Basin supports a cattail marsh dominated by narrow-leaf cattail (*Typha angustifolia*), scouring rush (*Equisetum telmateia*) and broad-leaf cattail (*Typha latifolia*).

Immediately downstream of the Debris Basin is a stream pool surrounded by coast live oak woodland dominated by coast live oak (*Quercus agrifolia*) and western sycamore. The slope to be traversed by the storm drain outfall supports mixed chaparral dominated by heart-leaved penstemon (*Keckiella cordifolia*) and black sage (*Salvia mellifera*). Other common species include on this slope include poison oak (*Toxicodendron diversilobum*), green-bark ceanothus (*Ceanothus spinosus*) and buck-brush (*Ceanothus cuneatus*). Note that this slope was completely burned in the Jesusita Fire in May 2009, but native vegetation has mostly recovered.

**Environmentally Sensitive Habitat.** The Mission Creek corridor has been designated as an Environmentally Sensitive Habitat Overlay by Santa Barbara County as documented in the Mission Canyon Community Plan. California sycamore woodland is ranked as S3 by the California Natural Diversity Data Base, meaning this plant community is vulnerable, at a moderate risk of extinction at the state level.

**Wildlife.** Mission Canyon in the project area supports a near contiguous corridor of riparian forest and oak woodland, which provides high habitat value for wildlife. A small amount of surface flow was observed in Mission Creek at the project site during a field survey on March 21, 2016. An approximately 30 foot diameter stream pool was present immediately downstream of the Debris Basin; however, fish were not observed.

The City of Santa Barbara is actively seeking to improve fish passage in Mission Creek and recently completed two fish passage improvement projects, including the Tallant Road bridge and the Flood Control District channels (near U.S. Highway 101).

Fish observed in Mission Creek include rainbow trout, goldfish, three-spined stickleback and mosquitofish (Sweetwater Environmental Biologists, 1995; Ecology Consultants, 2014). Fish observed in the estuary include tidewater goby, three-spined stickleback, prickly sculpin, topsmelt and striped mullet (City of Santa Barbara, 2012). Fish surveys (electro-fishing) was conducted in upper Mission Creek (including the project site) in 1995 following a high rainfall year and no fish were observed (Sweetwater Environmental Biologists, 1995). Habitat conditions during the May 1, 1995 fish survey included average water depth of 5 inches, 70 percent shade, and good cover and depth in pools for trout rearing, but fair to poor habitat for spawning. Note that these conditions were unusual due to the very high rainfall and above normal surface flows measured during the steelhead survey (2.6 cfs in lower Mission Creek on May 9, 1995).

A Baja California treefrog was heard calling at the Debris Basin on March 21, 2016. Reptiles were not observed during the field survey; however, a number of common species such as western fence lizard, gopher snake, terrestrial garter snake, and California kingsnake may occur within the project site.

Birds observed during the field survey included mourning dove, acorn woodpecker, American crow, spotted towhee, northern flicker, band-tailed pigeon, common raven, black phoebe (pair), Bullock's oriole (pair), Nuttall's woodpecker, white-crowned sparrow, yellow-rumped warbler, song sparrow (pair) and California quail. A pair of black phoebe appeared to have an active nest within the Debris Basin outlet structure.

Mammals observed near the project site during March 21, 2016 field survey were limited to pocket gopher (burrows) and coyote (scat, tracks). Black-tailed deer, opossum and raccoon were observed in lower Mission Creek in 2014 (Ecology Consultants, 2014).

**Wildlife Corridors.** Highly mobile species such as larger mammals and birds are expected to move between the coastal terrace and the foothills of the Santa Ynez Mountains. Mission Creek provides habitat and cover to traverse developed areas, a major transportation corridor, dense vegetation and steep slopes. Therefore, Mission Creek may be an important wildlife movement corridor in the region.

**Invasive Species and Level of Disturbance.** The California Invasive Plant Council has developed an Invasive Plant Inventory which rates weedy non-native plant species based on their potential to have severe ecological effects (high, moderate, limited). One species rated as “high” for invasiveness was found along the proposed storm drain alignment; red brome (*Bromus madritensis ssp. rubens*). In addition, four plant species rated as “moderate” and one species rated as “limited” for invasiveness were found within the project site.

Much of the project site is disturbed due to past roadway and debris basin construction and maintenance, and surrounding development. Accumulated sediment has not been removed from the Debris Basin since 2005. However, annual vegetation management is conducted in the creek bottom using hand tools (loppers and weed whackers).

**Special-Status Plant Species.** Special-status plant species are either listed as endangered or threatened under the Federal or California Endangered Species Acts, or rare under the California Native Plant Protection Act, or considered to be rare or of scientific interest (but not formally listed) by resource agencies, professional organizations (e.g., Audubon Society, California Native Plant Society [CNPS], The Wildlife Society), and the scientific community.

Santa Barbara County considers oak woodlands, oak forests and individual specimen oak trees as important biological resources. In 1998, the County Board of Supervisors established an Oak Protection Collaborative Process, primarily in response to large scale loss of oaks to vineyard development in the late 1990's. In 2003, The County Deciduous Oak Tree Protection and Regeneration Ordinance (no. 4490) was adopted to protect valley and blue oaks. The County's Grading Ordinance was subsequently revised to address native oak tree removal (Ordinance no. 4491), including coast live oak. These regulations limit the number of oak tree removals and require replacement for removal over established thresholds. Coast live oak trees are considered protected if they are at least 8 inches in diameter at breast height.

For the purposes of this project, special-status plant species are defined in Table 3. The literature search conducted for this impact analysis indicates 16 special-status plant species have the potential to occur within the region (e.g., Santa Barbara 7.5' quadrangle map). Table 4 lists these species, their current status, and the nearest known location relative to the project site. Based on the results of field survey of the project site conducted on March 21, 2016, coast live oak was the only special-status plant species observed. Table 5 provides information regarding coast live oak trees along the storm drain alignment. The location of these trees is provided in Figure 3.



**Table 3. Definitions of Special-Status Plant Species**

- Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in the Federal Register for proposed species).
- Plants that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register, December 24, 2015).
- Plants that meet the definitions of rare or endangered species under the CEQA (*State CEQA Guidelines*, Section 15380).
- Plants considered by the CNPS to be "rare, threatened, or endangered" in California (Lists 1B and 2).
- Plants listed by CNPS as plants about which we need more information and plants of limited distribution (Lists 3 and 4).
- Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5).
- Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.).
- Plants considered sensitive by other Federal agencies (i.e., U.S. Forest Service, Bureau of Land Management), State and local agencies or jurisdictions.
- Plants considered sensitive or unique by the scientific community or occurring at the limits of its natural range (*State CEQA Guidelines*).
- Trees protected by Santa Barbara County Ordinances.
- Rare plants of Santa Barbara County as defined by the Santa Barbara Botanic Garden (see SBBG, 2012)

**Table 4. Special-Status Plant Species of the Project Area**

Species	Status	Habitat Description	Nearest Known Location relative to the Project Site
Plummer's baccharis ( <i>Baccharis plummerae</i> )	List 4	Chaparral, woodland, coastal scrub	Mission Canyon (Wiskowski, 1988)
Catalina mariposa lily ( <i>Calochortus catalinae</i> )	List 4	Coastal scrub, grassland	Mission Canyon (Wiskowski, 1988)
Late-flowered mariposa lily ( <i>Calochortus fimbriatus</i> )	List 1B, LR	Chaparral, woodland	Upper Mission Canyon (CNDDDB, 2016)
Summer holly ( <i>Comarostaphylos diversifolia</i> ssp. <i>diversifolia</i> )	List 1B	Chaparral	Mission Canyon (Wiskowski, 1988)
Umbrella larkspur ( <i>Delphinium umbraculorum</i> )	List 1B	Woodland	Near San Roque Canyon (CNDDDB, 2016)
Mesa horkelia ( <i>Horkelia cuneata</i> var. <i>puberula</i> )	List 1B	Chaparral, woodland, coastal scrub	Cold Spring Trail, 3.7 miles to the northwest (CNDDDB, 2016)
Santa Barbara bed-straw ( <i>Galium cliftonsmithii</i> )	List 4	Woodland, chaparral	Mission Canyon (Wiskowski, 1988)
Santa Barbara honeysuckle ( <i>Lonicera subspicata</i> var. <i>subspicata</i> )	List 1B, LR	Chaparral, woodland, coastal scrub	Mission Canyon (Wiskowski, 1988)
White-veined monardella ( <i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i> )	List 1B	Chaparral, woodland	Upper Mission Canyon (historic, 1951) (CNDDDB, 2016)
Gambel's watercress ( <i>Nasturtium gambelii</i> )	FE, ST, List 1B, LR	Freshwater & brackish marshes	Santa Barbara (historic), 2 miles to the west (CNDDDB, 2015)
Coast live oak ( <i>Quercus agrifolia</i> )	CO-4491	Woodland, chaparral	On-site

**Table 4. Continued**

Species	Status	Habitat Description	Nearest Known Location relative to the Project Site
Nuttall's scrub oak ( <i>Quercus dumosa</i> )	List 1B, LR	Closed-cone coniferous forest, chaparral, coastal scrub	Mission Canyon (Wiskowski, 1988)
Kinsel's oak ( <i>Quercus X kinselae</i> )	LR	Chaparral, woodland	Mission Canyon
Bitter gooseberry ( <i>Ribes amarum</i> var. <i>hoffmannii</i> )	List 3	Chaparral, woodland	Mission Canyon (Wiskowski, 1988)
Checker-bloom ( <i>Sidalcea malviflora</i> ssp. <i>californica</i> )	LR	Chaparral	Mission Canyon (Wiskowski, 1988)
Sonoran maiden fern ( <i>Thelypteris puberula</i> var. <i>sonorensis</i> )	List 2B, LR	Meadows, seeps	Lower Mission Canyon (CNDDDB, 2016)

Status Codes:

- CO-4491: Protected under County Ordinance no. 4491
- FE: Federally Endangered (USFWS)
- List 1B: Rare or endangered in California and Elsewhere (California Native Plant Society)
- List 2B: Rare in California, but not elsewhere (California Native Plant Society)
- List 3: Plants About Which We Need More Information - Review List
- List 4: Plants of Limited Distribution
- LR: Locally rare (SBBG, 2012)

**Table 5. Coast Live Oak Tree Data**

Number	Location (see Figure 3)	Diameter (" at breast height)
1	Orange Grove Avenue/Tunnel Road intersection (southwest corner)	10
2	Eastern shoulder of Tunnel Road, northern end of alignment	21, 30
3	Western shoulder of Tunnel Road near proposed third manhole in Tunnel Road	22
4	Western shoulder of Tunnel Road across from the proposed drop inlet	20
5	Slope between Tunnel Road and Debris Basin	24

**Special-Status Wildlife Species.** Special-status wildlife species are defined in Table 6. The potential for these species to occur in the vicinity of the project site was determined by habitat characterization within the project site, review of sight records from other environmental documents and range maps described above. Table 7 lists special-status wildlife species that have the potential to occur within the project site for at least a portion of their life cycle.

**Table 6. Definitions of Special-Status Wildlife Species**

<b>Special-Status Wildlife Species</b>
<ul style="list-style-type: none"> <li>➤ Animals listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (50 CFR 17.11 for listed animals and various notices in the Federal Register for proposed species).</li> <li>➤ Animals that are candidates for possible future listing as threatened or endangered under the federal Endangered Species Act (Federal Register December 24, 2015).</li> <li>➤ Animals that meet the definitions of rare or endangered species under CEQA (<i>State CEQA Guidelines</i>, Section 15380).</li> <li>➤ Animals listed or proposed for listing by the State of California as threatened and endangered under the California Endangered Species Act (14 CCR 670.5).</li> <li>➤ Animal species of special concern to the CDFW (Shuford &amp; Gardali, 2008 for birds; Williams, 1986 for mammals; Moyle et al., 1989 for fish; and Jennings and Hayes, 1994 for amphibians and reptiles).</li> <li>➤ Animal species that are fully protected in California (California Fish and Game Code, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).</li> </ul>

**Table 7. Special-Status Wildlife Species of the Project Area**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Habitat</b>	<b>Status</b>	<b>Nearest Known Location</b>
Southern steelhead	<i>Oncorhynchus mykiss</i>	Perennial streams	FE, CSC, CH	Lower Mission Creek (City of Santa Barbara, 2012; Ecology Consultants, 2014)
Tidewater goby	<i>Eucyclogobius newberryi</i>	Coastal streams, estuaries	FE, CSC, CH	Mission Creek estuary (URS, 2005)
California red-legged frog	<i>Rana draytonii</i>	Instream pools	FT, CSC	Cinquefoil Creek (CNDDDB, 2016)
California newt	<i>Taricha torosa torosa</i>	Coastal streams in foothills	CSC	Mission Creek (Santa Barbara Botanic Garden, 2007)
Two-striped garter snake	<i>Thamnophis hammondi</i>	Streams, wetlands	CSC	Rattlesnake Canyon (CNDDDB, 2016)
Southwestern pond turtle	<i>Clemmys marmorata pallida</i>	Vegetated ponds & stream pools	CSC	San Roque Canyon (CNDDDB, 2016)
Yellow warbler	<i>Dendroica petechia</i>	Riparian woodlands	CSC	Lower Mission Canyon (Sweetwater, 1995)
Cooper's hawk	<i>Accipiter cooperii</i>	Woodlands, riparian areas	WL	Mission Canyon (CNDDDB, 2016; Lehman, 2015)
Big free-tailed bat	<i>Nyctinomops macrotis</i>	Caves, crevices (roosting)	CSC	Santa Barbara (non-specific, CNDDDB, 2016)

Status Codes:    CSC    California Species of Special Concern (CDFW)    SA    Special Animal (CDFW)  
                          CH    Critical Habitat (USFWS)                            ST    State Threatened (CDFW)  
                          FE    Federal Endangered (USFWS)                        SE    State Endangered (CDFW)  
                          FT    Federal Threatened (USFWS)                        WL    Watch List (CDFW)

Southern Steelhead. Steelhead are an anadromous form of rainbow trout, meaning it reproduces in freshwater, but spends much of its life cycle in the ocean, where improved foraging opportunities provide a greater growth rate. Twenty juvenile steelhead were observed immediately upstream of the State Street bridge in 2011, and a pair of steelhead were observed spawning near the Ortega Street bridge in 2000 (City of Santa Barbara, 2012). In addition, steelhead were observed in lower Mission Creek in 2014 (Ecology Consultants, 2014).

Steelhead are divided into 15 evolutionary significant units (ESU) based on similarity in life history, location, and genetic markers. The southern California ESU extends from the Santa Maria River basin south to the Mexican border. The southern California ESU was listed as endangered by the National Marine Fisheries Service (NMFS) on October 17, 1997. Lower Mission Creek, downstream of the confluence with Rattlesnake Creek is included in the National Marine Fisheries Service (NMFS) critical habitat designation for the South Coast Hydrologic Unit. However, fish access to the project site from perennial surface water downstream is prevented by an impassable barrier (old Mission Dam).

Tidewater Goby. This species is known to occur in the Mission Creek estuary (URS, 2005) and a portion of the estuary (Laguna Channel) has been designated as critical habitat by the U.S. Fish & Wildlife Service (USFWS). Due to downstream fish barriers and rarity of surface water at the project site, tidewater goby is not expected to occur.

California Red-legged Frog. This threatened species has not been reported from the Mission Creek watershed, and is considered absent from the project site in Mission Canyon.

California Newt and Two-striped Garter Snake. These California species of special concern are known from the Mission Creek watershed, and are considered potentially present at the project site in Mission Canyon.

Western Pond Turtle. This California species of special concern has not been reported from the Mission Creek watershed, but is present in many larger watersheds in the south coast region and has the potential to be present at the project site in Mission Canyon.

Yellow warbler and Cooper's Hawk. These special-status bird species are occasionally reported from Mission Canyon and have the potential to be present at the project site.

Big Free-tailed Bat. This California species of special concern has the potential to forage along Mission Canyon in the project area.

**Wetlands.** Definition. The U.S. Army Corps of Engineers (Corps) has jurisdiction over waters of the United States (U.S.) under the authority of the Section 404 of the Clean Water Act. The limit of jurisdiction in non-tidal waters extends to the ordinary high water mark and includes all adjacent wetlands. Waters of the U.S. are defined as:

*"All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; including all interstate waters including interstate wetlands, all other waters such as intrastate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce."*

The Corps and U.S. Environmental Protection Agency define wetlands as:

*"Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."*

Corps-defined wetlands are determined to be present if evidence of each of three criterion are observed (prevalence of hydrophytic vegetation, presence of hydric soils, and wetland hydrology).

Santa Barbara County has adopted the USFWS wetland definition (Santa Barbara County, 2015):

"Wetlands" must have one or more of the following attributes:

- At least periodically, the land support predominantly hydrophytes, that is plants adapted to moist areas;
- The substrate is predominately undrained hydric soil; and
- The substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season each year.

Jurisdictional Determination. Mission Creek is a relatively permanent (seasonal) tributary of the Pacific Ocean (a territorial sea and navigable water) and exhibits an ordinary high water mark. Therefore, Mission Creek is considered waters of the U.S. and within the jurisdiction of the Corps of Engineers. As Mission Creek exhibits a defined streambed and bank, it is also within the jurisdiction of CDFW under the California Fish & Game Code.

Wetlands. A wetland delineation was not conducted as project impacts within Mission Creek would be limited to existing grouted rock rip-rap. However, the streambed (including the Debris Basin) meets the County's definition of wetlands. Portions of the low flow channel and the Debris Basin bottom is expected to meet the Federal wetland definition.

### **Thresholds of Significance:**

The following thresholds are taken from the Santa Barbara County Environmental Thresholds and Guidelines Manual (revised 2015).

**General Impacts.** Disturbance to habitats or species may be significant, based on substantial evidence in the record (not public controversy or speculation), if they substantially impact significant resources in the following ways:

- Substantially reduce or eliminate species diversity or abundance;
- Substantially reduce or eliminate quantity or quality of nesting areas;
- Substantially limit reproductive capacity through losses of individuals or habitat;
- Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources;
- Substantially limit or fragment range and movement (geographic distribution or

animals and/or seed dispersal routes); and/or

- Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends.

**Wetland Impact Assessment Guidelines.** The following types of project-created impacts may be considered significant:

- Projects which result in a net loss of important wetland area or wetland habitat value, either through direct or indirect impacts to wetland vegetation, degradation of water quality, or would threaten the continuity of wetland-dependent animal or plant species are considered to have a potentially significant effect on the environment.
- Projects which substantially interrupt wildlife access, use and dispersal in wetland areas would typically be considered to have potentially significant impacts.

**Riparian Impact Assessment Guidelines.** The following types of project-related impacts may be considered significant:

- Direct removal of riparian vegetation.
- Disruption of riparian wildlife habitat, particularly animal dispersal corridors and or understory vegetation.
- Intrusion within the upland edge of the riparian canopy (generally within 50 feet in urban areas, within 100 feet in rural areas, and within 200 feet of major rivers), leading to potential disruption of animal migration, breeding, etc. through increased noise, light and glare, and human or domestic animal intrusion.
- Disruption of a substantial amount of adjacent upland vegetation where such vegetation plays a critical role in supporting riparian-dependent wildlife species (e. g., amphibians), or where such vegetation aids in stabilizing steep slopes adjacent to the riparian corridor, which reduces erosion and sedimentation potential.
- Construction activity which disrupts critical time periods (nesting, breeding) for fish and other wildlife species.

**Impact Assessment Guidelines for Woodlands and Forest Habitat Areas.** Project-created impacts may be considered significant due to changes in habitat value and species composition such as habitat fragmentation, removal of understory, alteration to drainage patterns, disruption of the canopy, removal of a significant number of trees that would cause a break in the canopy or disruption in animal movement in and through the woodland.

**Native Tree Impact Assessment.** In general, the loss of 10 percent or more of the trees of biological value on a project site is considered potentially significant.

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**Impact Discussion:**

- a. **No Impact:** California sycamore woodland occurs along Mission Creek upstream of the Debris Basin and is considered vulnerable to extinction. In addition, vegetation along Mission Creek is considered environmentally sensitive habitat. The proposed storm drain outfall would be located above-ground on existing rock rip-rap and would avoid sensitive riparian plant communities.
- b. **No Impact:** The only special-status plant species found at the project site is coast live oak, and is addressed under e. below.
- c. **Less than Significant Impact:** Loss of native vegetation would be limited to a very small amount of clearing (approximately 0.01 acres) on the slope to provide a level area for the storm drain outfall to lie on the ground surface. Due to small area affected, impacts to native vegetation are considered less than significant.
- d. **Less than Significant Impact.** Installation of the storm drain in Tunnel Road, the manholes and the drop inlet would result in the loss of non-native roadside vegetation. This vegetation has minimal habitat value and includes invasive plant species. Therefore, impacts to non-native vegetation are considered less than significant.
- e. **Less than Significant Impact.** Coast live oak trees occur in proximity to the storm drain alignment (see Table 5), but would not be removed as part of the project. The storm drain would be located along the margin of the canopy of tree nos. 3 and 4. However, the storm drain would be buried under existing pavement, and would not substantially affect these trees.
- f. **No Impact:** No chemicals, animals, human habitation or invasive plants would be associated with project implementation.
- g. **Less than Significant Impact with Mitigation.**

**Southern Steelhead and Tidewater Goby.** Due to downstream fish barriers, these special-status fish are not present and would not be impacted.

**California Newt, Western Pond Turtle and Two-striped Garter Snake.** The status of these species in the project area is unclear, and they may occur during high rainfall years when adequate stream pools and prey are available. However, the project has been designed to avoid the streambed and banks of Mission Creek, which would prevent loss of habitat and minimize the potential for construction-related mortality. Therefore, potential impacts to California newt, western pond turtle and two-striped garter snake are considered less than significant.

**Cooper's Hawk and Yellow Warbler.** The proposed project would not result in the loss of suitable habitat for these species. However, project-related construction activity during the breeding season may cause active nests to be abandoned and result in the loss of eggs and/or nestlings. This impact is considered potentially significant.

**Big Free-tailed Bat.** This species could forage within the project area during construction. However, construction would be limited to daytime when this species is inactive. The project would not result in the loss or disturbance of any roosting habitat. Overall, impacts to this species are considered less than significant.

- h. Less than Significant Impact.** As discussed above, the project-related loss of wildlife habitat would be minimal and construction-related disturbance would be limited and brief. Therefore, a significant reduction in diversity or numbers of animals on-site is not anticipated.
- i. Less than Significant Impact.** As discussed in c. and g., a small amount of project-related habitat loss would occur. However, such habitat loss is not anticipated to affect local wildlife populations.
- j. Less than Significant Impact.** Mission Creek may be used as a corridor by wildlife moving through the area as it provides habitat and cover in a suburban area, and provides passage through steep topography. Vegetation removal and construction-related disturbance may affect local wildlife movements. Due to the lack of project-related barriers to wildlife movement, the small scale and short duration of project construction, and lack of nighttime construction work (when most wildlife movement occurs), impacts to wildlife movement are considered less than significant.
- k. Less than Significant Impact.** Project-related construction would not involve lighting or fencing, but noise levels and human presence (construction workers) would increase during the construction period. The project would not result in a permanent or substantial temporary increase in these factors which may hinder normal activities of wildlife. Impacts are considered less than significant.

#### **Mitigation and Residual Impact:**

**BIO-1: Special-Status Birds.** Impacts to breeding Cooper's hawk and yellow warbler shall be minimized by conducting breeding bird surveys prior to the initiation of construction (should construction be scheduled during the breeding season, March 1 through August 1). If active nests of these special-status species or other birds protected under the California Fish & Game Code or Migratory Bird Treaty Act are found within or adjacent to the work area, construction activities within 200 feet of active nests (or other distance authorized by USFWS and/or the California Department of Fish and Wildlife would be postponed until the nest is abandoned or young have fledged. Additional breeding bird surveys would be conducted as needed to monitor active nests and allow vegetation removal and construction to proceed.

**Plan Requirements and Timing:** This requirement shall be included in the project's plans and specifications.

**MONITORING:** The County project engineer shall ensure compliance with Mitigation Measure BIO-1. **Residual Impact:** Implementation of the above measures would reduce impacts to special-status birds to a level of less than significant.



Full implementation of the above mitigation measures would reduce project-specific and cumulative impacts to biological resources to a level of less than significant.

#### 4.5 CULTURAL RESOURCES

Will the proposal result in:	Potentially Significant	Less than Significant with Mitigation	Less than Significant	No Impact	Reviewed Under Previous Document
<b>Archaeological Resources</b>					
a. Disruption, alteration, destruction, or adverse effect on a recorded prehistoric or historic archaeological site				X	
b. Disruption or removal of human remains?				X	
c. Increased potential for trespassing, vandalizing, or sabotaging archaeological resources?				X	
d. Ground disturbances in an area with potential cultural resource sensitivity based on the location of known historic or prehistoric sites?		X			
<b>Ethnic Resources</b>					
e. Disruption of or adverse effects upon a prehistoric or historic archaeological site or property of historic or cultural significance to a community or ethnic group?				X	
f. Increased potential for trespassing, vandalizing, or sabotaging ethnic, sacred, or ceremonial places?				X	
g. The potential to conflict with or restrict existing religious, sacred, or educational uses of the area?				X	

#### Setting:

For the purposes of this document, the chronological framework postulated by King (1990) and Arnold (1992) for the Santa Barbara Channel region is used to discuss the Paleo-Indian, Early Holocene, Early Period, Middle Period, Middle to Late Transition, and Late periods of cultural development in the larger Santa Barbara County region.

**Archeological Context.** The Paleo-Indian Period is the earliest known human occupation of the Santa Barbara area, with evidence of a developing maritime culture found mostly on the Channel Islands. Recent work by scholars has pushed these earliest dates back further. There are 50 sites reported on San Miguel and Santa Rosa islands dating between 13,000 and 7,500 B.C. (Davis et al., 2010; Erlandson and Braje, 2008). Mainland coastal sites occupied during this time would have been submerged later by rising sea levels.

The Millingstone Period is defined by the predominance of hand stones and milling slabs in the archaeological record, suggesting a reliance on hard seeds and other plant foods. A variety of flaked stone tools including leaf-shaped bifaces, oval bifacial knives, choppers, and scrapers is also present. This period was a time of rising sea levels that created additional lagoons and estuaries (Glassow et al., 2007). Faunal assemblages from various sites indicate prehistoric populations also consumed terrestrial and marine mammals, fish, and shellfish indicating increased mobility between coastal and inland camps (Jones et al., 1994). Residential bases are presumed to have been comprised of extended families during this period.

Most Early Period archaeological sites are recorded at or near the coast, or on the Channel Islands. This was a time of rising sea levels that created additional lagoons and estuaries (Glassow et al., 2007). This period is characterized by an abundance of manos, metates, and a variety of flaked stone; plano convex cores and core tools of quartzite, basalt and other volcanic stones are common. Although deer are represented in the archaeological record, hunting and fishing contributed little to the diet, with the faunal diet relying heavily on mussels and Pismo clams. On the Channel Islands, millingstones do not occur. The island diet is represented by the remains of shellfish, pinnipeds, and marine birds. Bone gorges occur and spire-lopped shell beads (*Olivella* spp.) appear in burials (Glassow et al., 2007). Residential bases are presumed to have been comprised of extended families during this period.

Prehistoric technology and economy of the Middle Period became markedly more complex after 2550 B.P. The artifact assemblage contains shellfish hooks and other fishing gear, saucer-type *Olivella* spp. beads, and contracting-stemmed projectile points. Subsistence practices emphasized fish and acorns, with a greater use of seasonal resources and the first attempts at food storage (Glassow et al., 1988; King, 1990). Continuation of trade relationships is evident in the increased number and diversity of obsidian items and beads associated with this period. Settlement patterns were similar to those of the prior period. Sites were occupied on an extensive basis, but not as permanent settlements. These residential bases functioned in conjunction with short-term, smaller occupations at specialized resource processing areas (Jones and Ferneau, 2002).

Coastal settlement increases significantly during the Middle to Late Transition Period (c. 950 – c. 700 B.P.). Sedentism is apparent, along with formal architecture, ceremonial structures and traditional cemeteries. Cultural ornamentation and elaboration during this time implies a change in society, elevating attributes of achieved status and wealth. Maritime orientation increases with intensified fishing using circular shell fishhooks. Regional exchange indicates a boost in socioeconomic and political complexity. Faunal remains reveal the exploitation of a diverse array of marine and terrestrial habitats and species. More refined mortars and pestles reflect an emphasis on pulpy plant foods. Ritually associated artifacts, like bear claws, appear in cemeteries on the mainland coast. A dramatic expansion of *Olivella* spp. wall/saucer beads signify increased social differentiation (Glassow et al., 2007).

During the Late Period, terrestrial resource production is thought to have decreased significantly, while socioeconomic complexity evolved. A conversion to concave based projectile points led to the abandonment of asphaltum, which had been used for attaching spear points. Shellfish remained the principal protein food. A ranked society with hereditary elite was established. Excavations at Mescalitan Island (CA-SBA-46) on the mainland Santa Barbara coast recovered burials on whalebone inlaid with shell beads and rich grave goods, along with tubular beads. Semi-subterranean sweat lodges are also common. Population growth and socioeconomic complexity transpires, along with environmental change (Glassow et al., 2007).

**Ethnographic Context.** The project site is located within the ethnographic territory of the Chumash, who inhabited the Santa Barbara Channel Islands and the mainland region stretching from San Carpóforo Creek in San Luis Obispo County south to Malibu Creek in Los Angeles County, and at least as far east as the Carrizo Plain (Kroeber, 1925; Gibson, 1991). The Chumash have been divided into several geographic groups, each associated with a distinct language dialect (Hoover, 1986).

The Chumash were a non-agrarian culture who relied on hunting and gathering for sustenance. They practiced a regular seasonal round of population dispersal and aggregation in response to the location and seasonal availability of different food resources (Landberg, 1965). In this way, large coastal villages would have been fully populated only in the late summer when pelagic fishing was at its peak. Shellfish were also exploited, including *Mytilus californianus* (mussel) and *Haliotis* spp. (abalone) from rocky shores and *Chione* spp. (cockle) and various species of clams from sandy beaches. Acorns were a food staple; they were ground into flour using stone mortars and pestles and then leached to remove tannic acid. In addition, a wide variety of seeds, including *chia* from various species of sage, were utilized. Through winter, the Chumash depended largely on stored food resources. During the spring and summer, the population dispersed through inland valleys in order to harvest wild plant resources such as roots, tubers, or greens (Landberg, 1965).

In this area, as elsewhere in California, basketry served many of the functions that pottery did in other places. Baskets were used for cooking, serving, storage, and transporting burdens. Some basket makers wove baskets so tightly that they could hold water while others waterproofed their baskets by lining them with pitch or asphaltum (Chartkoff and Chartkoff, 1984).

The Chumash lived in large, hemispherical houses constructed by planting willows or other poles in a circle and bending and tying them together at the top. These structures were then covered with tule mats or thatch. Structures such as this housed 40 to 50 individuals, or three-to-four member family groups. Dance houses and sweathouses are also reported for the Chumash (Kroeber, 1925).

Chumash political organization was typified by small-scale chiefdoms. Chiefs were associated with villages or segments of larger villages. Higher status chiefs controlled entire regions containing several villages. The chiefly offices were normally inherited through the male line with a primogeniture rule in effect. Chiefs had several bureaucratic assistants to help in political affairs and serve as messengers, orators, and ceremonial assistants. A number of status positions were associated with specialized knowledge and rituals, such as weather prophet, ritual poisoner, or herbalist (Bean, 1974).

The protohistoric culture of the Chumash, defined as the time when intermittent trade and contact was experienced between Native Americans and Spanish trading vessels en route to the Orient, was disrupted by the arrival of the Spanish expedition led by Gaspar de Portolá in 1769. The establishment of the Mission Santa Barbara (located approximately 2 miles south of the project site) further disrupted Chumash culture in Santa Barbara County. Archaeological evidence verifies not only that the native population was rapidly decimated by missionization, but also the culture itself disintegrated rapidly. Chartkoff and Chartkoff (1984) note that Spanish settlement barred many Native Americans from traditionally important resources including shellfish, clam shell beads, steatite, and asphaltum.

**Record Search.** A records search was conducted by the Central Coast Information Center (CCIC) on March 15, 2016. The CCIC records search identified three archeological sites within 0.25 miles of the project site. Site CA-SBA-1713 is comprised of a historic homestead and ranch, CA-SBA-1950 is a prehistoric petroglyph within Mission Canyon, and CA-SBA-1963 is the old Mission Dam within Mission Creek. None of these sites are located in close proximity to the project site.

The Native American Heritage Commission conducted a file search on March 16, 2016 to identify any sacred lands in the project area. The file search failed to identify any cultural resources within the immediate project area.

**Field Investigations.** A total of four archaeological investigations have been conducted for other projects within a 0.25-mile radius of the project site. On April 7, 2016, Padre Associates archeologist Andrew Nicchitta conducted a field survey of the proposed storm drain alignment (and 50 foot buffer), and a potential staging area located east of the Debris Basin. Ground surface visibility was low, mostly due to paving within Tunnel Road and Orange Grove Avenue, and rock rip-rap at the Debris Basin. Sandstone boulders near the storm drain alignment were inspected for petroglyphs. No prehistoric or historical materials were observed in the course of this survey.

**Native American Consultation.** Each of the Native American contacts provided by the Native American Heritage Commission were mailed a letter on April 5, 2016 requesting information about the project site and soliciting any concerns about the project. The only response was from Gino Altamirano of the Coastal Band of the Chumash Nation requesting a copy of a Cultural Resources Study Report prepared for the Mission Creek Flood Control Study in 1985.

#### **Impact Discussion:**

- a. No Impact:** Based on the results of the record search, past field investigations and the archeological field survey conducted for the project, ground disturbance associated with proposed storm drain would not disrupt any archeological sites.
- b. No Impact:** Impacts to known archeological sites would not occur; therefore, disruption or removal of human remains is not anticipated.
- c. No Impact:** The proposed project would not result in an increase in population or increased access to archeological sites. Therefore, an increased potential for trespassing, vandalism or sabotage is not anticipated.
- d. Less than Significant Impact with Mitigation.** No disruption or other adverse effects to known archaeological sites are anticipated. However, due to the presence of a nearby

petroglyph and propensity for Native American settlements to occur near drainages (such as Mission Creek), a small potential exists for unknown buried cultural resources to be adversely affected by project-related construction activities.

- e. **No Impact:** No prehistoric or historic archeological sites or properties of historic or cultural significance would be adversely affected by the proposed project.
- f. **No Impact:** No ethnic, sacred or ceremonial places occur in the vicinity of the project; therefore, no adverse effects are expected.
- g. **No Impact:** The proposed project would not result in an increase in population or increased access to ethnic, sacred or ceremonial places. Therefore, increased conflicts with religious, sacred or educational uses are not expected.

#### **Mitigation Measures and Residual Impacts:**

**AR-1: Evaluation and Avoidance of Discovered Cultural Resources.** To minimize potentially significant impacts to unreported archeological resources, the following measures shall be implemented:

- At the commencement of any project-related ground disturbance, an archaeologist shall provide construction workers an orientation on cultural resources and directions as to what steps are to be taken if a find is encountered.
- In the event that archaeological resources are unearthed during project construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find pursuant to Phase 2 investigations of the County Archeological Guidelines. If the find is determined to be significant, the site shall be subject to a Phase 3 mitigation program consistent with the County Archeological Guidelines. After the find has been appropriately mitigated, work in the area may resume. A Chumash representative shall be retained to monitor any mitigation work associated with Native American cultural material.
- If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission.

**Plan Requirements/Timing:** These conditions shall be included in the project plans and specifications. **MONITORING:** The County on-site inspector shall ensure the measures are fully implemented.

Full implementation of the above mitigation measures would reduce project-specific and cumulative impacts to cultural resources to a level of less than significant.

#### 4.6 ENERGY

Will the proposal result in:	Potentially Significant	Less than Significant with Mitigation	Less than Significant	No Impact	Reviewed Under Previous Document
a. Substantial increase in demand, especially during peak periods, upon existing sources of energy?				X	
b. Requirement for the development or extension of new sources of energy?				X	

#### Setting:

Electrical service is provided by Southern California Edison and natural gas is provided by Southern California Gas in the project area. The County has not identified significance thresholds for electrical and/or natural gas service impacts.

#### Impact Discussion:

- a. **No Impact:** The project consists of new storm drain and would not consume energy, with the exception of fossil fuels used in construction equipment and vehicles. Overall, no increase in demand for energy would occur.
- b. **No Impact:** The project would not require or induce new development or require extension of existing sources of energy.

#### Mitigation and Residual Impact:

No mitigation is required. No cumulatively considerable or significant residual impacts are anticipated.

#### 4.7 FIRE PROTECTION

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

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**Setting:**

The project site is located within a Very High Fire Hazard Severity Zone as designated by the California Department of Forestry and Fire Protection. Native vegetation on the slope to be traversed by the outfall is considered highly flammable. Fire response services for the site are provided by the Santa Barbara County Fire Department, served by Station 15 located at 2491 Foothill Road. The Santa Barbara County Fire Department employs a five minute response time in the region. The Mission Canyon Association facilitates fire safety preparedness of homeowners.

**Impact Discussion:**

- a. **No Impact:** The proposed project does not involve the construction of habitable or other flammable structures, and would not directly or indirectly lead to any such structures that may increase the exposure of the public to fire hazard.
- b. **Less than Significant Impact with Mitigation:** Construction activities would occur in areas supporting flammable vegetation and have the potential to significantly increase fire hazard to adjacent residential areas.
- c. **No Impact:** The proposed project does not include any new development.
- d. **No Impact:** The proposed project does not include any new development (excluding the proposed storm drain), and would not hamper fire prevention activities in adjacent areas.
- e. **No Impact:** Excluding HDPE pipe, the proposed storm drain would be constructed of non-flammable materials (primarily steel and Portland cement) and would not require fire protection. The HDPE pipe would be fully buried and not subject to damage by wildfire.

**Mitigation and Residual Impact:**

**FIRE-1: Fire Prevention.** To minimize potential fire hazards, a Fire Awareness and Avoidance Plan shall be implemented. The Plan shall include the following:

- Fire prevention measures addressing cutting, grinding and welding;
- Maintaining fire extinguishers in every vehicle on-site;
- Providing a water truck;
- Minimizing activity during red flag alerts; and
- Communication with emergency response agencies.

**Plan Requirements/Timing:** The Fire Awareness and Avoidance Plan shall be submitted prior to the initiation of construction. **MONITORING:** The County-appointed inspector shall ensure the Plan is fully implemented.

Full implementation of the above mitigation measure would reduce project-specific and cumulative fire hazard impacts to a level of less than significant.

**4.8 GEOLOGIC PROCESSES:**

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

**Setting:**

Based on the Geologic Map of the Santa Barbara 7.5' Quadrangle (Dibblee, 1986), the project site is underlain by stream channel deposits, primarily gravel and sand. Adjacent areas are underlain by the Sespe Formation. The nearest mapped fault is the Mission Ridge Fault which is considered potentially active and located approximately 1.2 miles south of the site. The Mesa Fault is considered active and located approximately 3.0 miles to the south. There are no Alquist-Priolo fault hazard areas in the project region.



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**Impact Discussion:**

- a. **Less than Significant Impact.** Based on the Seismic Safety and Safety Element of the Santa Barbara County Comprehensive Plan, the project site is located in an area assigned low problem ratings for liquefaction and compressible-collapsible soils and moderate problem ratings for seismic-tectonic hazards, tsunami, slope stability/landslides, expansive soils and soil creep. The proposed outfall would be located on a steep slope; however, it would be installed and anchored above-ground and would not result in a reduction in slope stability or cause landslides. The proposed project would not include any habitable structures; therefore, no increase in geologic hazards to the public would occur.
- b. **Less than Significant Impact:** Earthwork associated with the proposed project would be very minor and limited to trenching along the Tunnel Road right-of-way. No cut or fill slopes would be created, and the trenches would be backfilled, compacted and pavement replaced.
- c. **No Impact:** The ground surface would be restored following storm drain installation, with no permanent changes in topography. The proposed project would not cause or increase public exposure to bluff retreat or sea level rise.
- d. **No Impact:** Based on the Seismic Safety and Safety Element of the Santa Barbara County Comprehensive Plan, no Areas of Special Geologic Interest occur in the project area. A search of the University of California Museum of Paleontology data base did not identify any fossils in the project area. Project-related ground disturbance would occur in recent alluvium, such that intact paleontological resources would not be present. No impacts to unique geologic, paleontologic, or physical features would occur.
- e. **Less than Significant Impact:** The project does not involve hillside grading or other earthwork on slopes that would substantially increase soil erosion. The very small amount of soil movement required to lay the storm drain on the slope is not anticipated to result in substantial erosion. Potential erosion associated with storm water flows during the construction period is addressed in Section 4.16.
- f. **Less than Significant Impact:** The proposed project would not result in substantial changes in soil erosion or deposition of sediments that would significantly affect Mission Creek. A Storm Water Pollution Prevention Plan would be implemented during storm drain installation to minimize discharge of silt-laden storm water to Mission Creek. Therefore, impacts from increased erosion or siltation would be less than significant.
- g. **No Impact:** The proposed project would not involve the placement of septic systems.
- h. **No Impact:** The proposed project does not involve the extraction or processing of minerals or ore.
- i. **No Impact:** No grading of existing slopes is proposed.
- j. **No Impact:** Excavation associated with storm drain installation would occur within previously disturbed areas and would not result in the loss of topsoil.

- k. Less than Significant Impact:** Vibration would be generated by heavy equipment during storm drain installation activities, and may be detected at nearby residences (as close as 35 feet away) during periods of peak heavy equipment activity. However, due to the distance to the nearest residence, relatively small size and amount of heavy equipment, the small number of persons affected, vibration impacts are considered less than significant.
- l. No Impact:** No spoils would be generated and any material excavated would be used on-site.

**Mitigation and Residual Impact:**

No mitigation is required. No cumulatively considerable or significant residual geologic impacts are anticipated.

**4.9 HAZARDOUS MATERIALS/RISK OF UPSET**

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

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**Setting:**

The project area supports residential land uses. No croplands or industrial land uses are located in the immediate area. Based on review of the GeoTracker (State Water Resources Control Board) and ENVIROSTOR (California Department of Toxic Substances Control) data bases, hazardous materials issues in the immediate project area are limited to:

- An abandoned naval reserve armory site with potential lead contamination, located 1.8 miles to the southeast.
- Leaking underground storage tank (gasoline) caused soil contamination at the Santa Barbara Botanic Gardens (case closed in 1996); and
- Leaking underground storage tank (diesel) caused soil contamination at the Tunnel Road Reservoir (case closed in 2016).

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

**Impact Discussion:**

- a. **No Impact:** The project site does not have a history of hazardous materials production, use or storage. Therefore, project implementation would not result in exposure of persons or the local environment to hazardous materials.
- b. **Less than Significant Impact:** Excluding fuels, lubricants, hydraulic fluid and coolant used by construction equipment and vehicles, the project does not involve the use, storage or distribution of hazardous or toxic materials. Equipment and vehicles associated with the project would be fueled from a maintenance vehicle located away from drainages and residences. No storage of fuel or other vehicle fluids is proposed at or near the project site.
- c. **No Impact:** The affected portion of Tunnel Road provides access to a small number of residences, and hazardous materials are not transported on this roadway. Trenching for storm drain installation would be conducted with standard traffic control and would not increase the potential for accidents or upset conditions to result in the exposure of the public to hazardous materials.
- d. **No Impact:** The proposed project would not interfere with any emergency response plan. Traffic control would be provided on Tunnel Road (and Orange Grove Avenue if needed), and would ensure emergency vehicles can safely transit the work area.
- e. **No Impact:** The proposed project does not involve the creation, storage or handling of any hazardous materials, pathogens or disease vectors and would not create any potential public health hazard.
- f. **No Impact:** The proposed project does not include any new development near hazardous materials.

- g. No Impact:** No oil or gas wells or other oil production facilities, or oil or gas pipelines occur at the project site. Based on the California Department of Conservation Well Finder application, the nearest recorded oil well is a dry hole (plugged) located 3.0 miles to the west. Therefore, project implementation would not result in exposure of persons or property to these hazards.
- h. No Impact:** The proposed project does not include any activities that would affect public water supplies.

**Mitigation Measures and Residual Impacts:**

No mitigation is required. No cumulatively considerable or significant residual impacts are anticipated.

**4.10 HISTORIC RESOURCES**

<b>Will the proposal result in:</b>	<b>Potentially Significant</b>	<b>Less than Significant with Mitigation</b>	<b>Less than Significant</b>	<b>No Impact</b>	<b>Reviewed Under Previous Document</b>
<b>a.</b> Adverse physical or aesthetic impacts on a structure or property at least 50 years old and/or of historic or cultural significance to the community, state or nation?				X	
<b>b.</b> Beneficial impacts to a historic resource by providing rehabilitation, protection in a conservation/open easement, etc.?				X	

**Setting:**

**Early Regional History.** In 1542, Juan Sebastián Cabrillo was the first of the exploring Europeans to sail along the California coast. Gaspar de Portolá led the first land expedition in 1769, accompanied by Fray Junípero Serra, beginning the establishment of California missions, and European and Mexican occupation. The Spanish founded El Presidio Real de Santa Bárbara in 1782 and Mission Santa Bárbara was established in 1786. Newly baptized Chumash provided almost all the labor to construct and maintain the missions, including aqueducts and dams near the Project Site that directed freshwater to Mission Santa Bárbara (Macko, 1985; Barter et al., 1994).

While the purpose of the missions was to convert the local Native Americans into Catholic citizens of Spain, the mission system was primarily a way for Spain to manage the indigenous populations of Alta California. Particularly in Santa Barbara County, the arrival of the Spanish and the subsequent establishment of the missions was the beginning of the end of tribal life for the local Chumash population. The destruction of native culture was caused by the alteration of the landscape due to the introduction of European plants and animals, the destruction of social systems by new mission life ways, and European diseases (Bean, 1968; Lightfoot, 2005).

In 1821, Mexico declared independence from Spain; a year later, California became a Mexican Territory. After the secularization of the missions in 1834, lands were gradually transferred to private ownership via a system of land grants (Hoover, 1990). Although the project site is located within the former mission lands, the location was not included in the land grant system.

The standard rancho comprised a central family house with adjacent quarters for domestic servants and *vaqueros*. The labor force mostly consisted of local Chumash and often small rancherías or villages were scattered about the estate (Lebow et al., 2001). Sheep and cattle ranching became the principal agricultural activities, primarily for the lucrative hide and tallow trade (Bean, 1968).

Following the Bear Flag Revolt in 1846, John C. Frémont and his troops marched through the area while traveling to Santa Barbara. President Polk signed the Treaty of Guadalupe Hidalgo in 1848, marking the formal transfer of the territory to the United States. California was recognized as a state in September 1850.

Across California, courts reviewed the legality of each land grant on an individual basis. The Land Act of 1851 required all land grant owners to prove their title and ownerships rights. Because the Californios relied on vague surveys and land titles, it took an average of 17 years to receive their American land patents (Bean, 1968; Palmer, 1999).

During the early American Period, the *ranchos* continued to raise cattle and sheep, but the industry shifted from hides and tallow to dairy and meat products. A drastic population increase during the Gold Rush caused the demand (and price) for California livestock to soar (Barter et al., 1995). The severe drought from 1862 to 1864 was devastating for the cattle industry. By 1869, emphasis was on dairy cattle, sheep herding and crop farming.

**Local History.** Following the first Spanish expeditions, historic occupation in the Mission Canyon area can be divided into three settlement periods: the Mission Period (1769-1830); the Rancho Period (1830-1865) and the American Period (1865-1915). Construction of the Santa Barbara Mission at the base of Mission Canyon in 1786 and establishment of numerous ranchos affected the physical and cultural landscape in the region. During the Mission Period, Mission Creek was dammed to provide water to the Mission complex, and a stone aqueduct was used to carry water to the Mission. During the Rancho Period, the region was under both Mexican and American rule, as large land holdings were distributed by the Mexican governor which were used as cattle ranches. A shift from cattle ranching to farming marked the beginning of the American Period.

An increase in population through the late nineteenth century encouraged improvements in transportation and shipping in Santa Barbara County. El Camino Real became a county road in 1861, a toll road was built over San Marcos Pass in 1868, and Stearns Wharf was constructed in 1872. The railroads brought the largest improvements: the Pacific Coast Railroad connected Port San Luis Obispo with Los Alamos via the Santa Ynez Valley in 1882 and the Southern Pacific Railroad provided service from San Francisco to Los Angeles (with many stops in Santa Barbara County) by 1905 (County of Santa Barbara, 1993).

By the 1880's, the Mission Canyon community had its own elementary school, which was located just west of County Fire Station 15 on Foothill Road. Another important structure is the Rockwood Inn located at the entrance to Mission Canyon. The Inn burned in 1927, but was re-built in 1928.

The Santa Barbara Historic Landmarks Advisory Commission has designated two sites in Mission Canyon as County Landmarks:

- Glendessary English Tudor Mansion (1900); and
- Santa Barbara Botanic Garden site: Mission dam and aqueduct (~1780's), "Indian steps" , information kiosk (1937), original library (1941), Campbell bridge and Caretakers cottage (1972).

**Record Search.** The record search conducted at the CCIC did not identify any historic sites in the project area. The nearest designated County landmark is the Santa Barbara Botanic Garden site, located approximately 0.3 miles south of the project site.

**Impact Discussion:**

- a. **No Impact:** No historic structures or properties would be affected by the proposed project.
- b. **No Impact:** No historic resources occur in the project vicinity, such that there are no opportunities for rehabilitation or protection of such resources.

**Mitigation and Residual Impact:**

No mitigation is required. No cumulatively considerable or residual impacts are anticipated.

**4.11 LAND USE**

<b>Will the proposal result in:</b>	<b>Potentially Significant</b>	<b>Less than Significant with Mitigation</b>	<b>Less than Significant</b>	<b>No Impact</b>	<b>Reviewed Under Previous Document</b>
a. Structures and/or land use incompatible with existing land use?				X	
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X	
c. The induction of substantial growth or concentration of population?				X	
d. The extension of sewer trunk lines or access roads with capacity to serve new development beyond this proposed project?				X	

<b>Will the proposal result in:</b>	<b>Potentially Significant</b>	<b>Less than Significant with Mitigation</b>	<b>Less than Significant</b>	<b>No Impact</b>	<b>Reviewed Under Previous Document</b>
<b>e.</b> Loss of existing affordable dwellings through demolition, conversion or removal?				X	
<b>f.</b> Displacement of substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X	
<b>g.</b> Displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X	
<b>h.</b> The loss of a substantial amount of open space?				X	
<b>i.</b> An economic or social effect that would result in a physical change? (i.e. Closure of a freeway ramp results in isolation of an area, businesses located in the vicinity close, neighborhood degenerates, and buildings deteriorate. Or, if construction of new freeway divides an existing community, the construction would be the physical change, but the economic/social effect on the community would be the basis for determining that the physical change would be significant.)				X	
<b>j.</b> Conflicts with adopted airport safety zones?				X	

**Setting:**

Land uses around the project site are single-family residential, with the Mission Creek Debris Basin to the east. Land use designations along Tunnel Road and Orange Grove Avenue near the project site are RES-1.0 (single-family residential), with Residential Ranchette to the east and west. Parcels along Tunnel Road and Orange Grove Avenue near the project site are zoned 1-E-1 (One-Family Residential) and subject to the County’s Mission Canyon Community Plan.

Proposed construction would occur within the existing County right-of-way (40 feet wide) along Tunnel Road, and on County-owned APN 023-033-005 (2.24 acres along Mission Creek). Should the proposed storm drain extend into Orange Grove Avenue, construction would occur on a private parcel (APN 023-032-001).

**Impact Discussion:**

- a. No Impact:** The proposed project is a new storm drain which would serve the existing roadways and surrounding residential parcels. Therefore, the project is considered compatible with existing land uses.

- b. No Impact:** The proposed project is potentially consistent with all applicable plans and policies of the County's Comprehensive Plan and Mission Canyon Community Plan (see Tables 8 and 9).
- c. No Impact:** The proposed project is limited to a new storm drain to handle existing run-off, and would not facilitate or result in population growth or changes in the spatial configuration of the existing population.
- d. No Impact:** The proposed project does not include the extension of sewer lines or roadways.
- e. No Impact:** The proposed project would not remove or displace any dwellings.
- f.** See e.
- g.** See e.
- h. No Impact:** No loss of open space would occur as a result of the proposed project.
- i. No Impact:** No social or economic effect would occur that would result in a physical change in the local community. Construction-related trenching would not result in the isolation of any land uses.
- j. No Impact:** The project site is located approximately 7.3 miles east-northeast of the Santa Barbara Airport. The project would not conflict with any airport safety zones.

**Mitigation and Residual Impact:**

No mitigation is required. No cumulatively considerable or significant residual impacts are anticipated.

**4.12 NOISE**

<b>Will the proposal result in:</b>	<b>Potentially Significant</b>	<b>Less than Significant with Mitigation</b>	<b>Less than Significant</b>	<b>No Impact</b>	<b>Reviewed Under Previous Document</b>
<b>a.</b> Long-term exposure of people to noise levels exceeding County thresholds (e.g. locating noise sensitive uses next to an airport)?				X	
<b>b.</b> Short-term exposure of people to noise levels exceeding County thresholds?		X			
<b>c.</b> Project-generated substantial increase in the ambient noise levels for adjoining areas (either day or night)?		X			



### Setting:

The dominant noise source in the project area is traffic on Tunnel Road, Mission Canyon Road and other local roadways. Noise sensitive receptors in the immediate vicinity of the project site include single-family residences located along Tunnel Road, Orange Grove Avenue and Mission Canyon Road. The nearest residence (1440 Tunnel Road) is located approximately 35 feet north of the storm drain alignment.

A noise measurement taken along Tunnel Road at the project site from 10:46 to 11:06 a.m. on March 21, 2016 (20 feet from center-line of Tunnel Road) yielded a noise level of 52.6 dBA Leq. Traffic noise on Tunnel Road was the dominant noise source, including motorists using the driveway at 1440 Tunnel Road to turn-around to find roadside parking.

### Impact Discussion:

- a. **No Impact:** The proposed project is limited to a storm drain which would not generate any noise. Regular maintenance would not be required, such that noise associated with maintenance vehicles or equipment would not occur.
- b. **Less than Significant Impact with Mitigation:** Heavy equipment activity would occur at various times at the site over the anticipated 8 to 10 week construction period. Noise modeling was conducted using the Federal Highway Administration Roadway Construction Noise Model to estimate the short term noise levels for the peak construction scenario (trenching). The estimated peak noise level is 80.1 dBA Leq at the nearest residence (35 feet to the north). The County has not developed any short-term noise thresholds. However, construction activities within 1,600 feet of a residence are considered to generally result in a potentially significant impact (County of Santa Barbara, 2015). Implementation of Mitigation Measure **NOISE-1** would ensure short-term noise impacts are reduced to less than significant levels.
- c. See b. above.

### Mitigation and Residual Impact:

**NOISE-1: Construction Noise Limitation.** To minimize potentially significant construction-related noise impacts to adjacent residences, the following measures shall be implemented:

- Construction activities involving heavy equipment or heavy-duty truck traffic shall be limited to 7 a.m. to 4:30 p.m., with no work on weekends or holidays.
- Stationary construction equipment such as generators shall be provided with acoustic shielding as per DevStd LU-MC-4.1 of the Mission Canyon Community Plan.

**Plan Requirements/Timing:** These conditions shall be included in the project specifications. **MONITORING:** The County-appointed inspector shall ensure the measure is fully implemented.

Full implementation of the above mitigation measure would reduce project-specific and cumulative noise impacts to a level of less than significant.

#### 4.13 PUBLIC FACILITIES

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

#### Impact Discussion:

- a. **No Impact:** The proposed project does not include any new development or any facilities that would require police protection or health care services.
- b. **No Impact:** The project does not include any residential land uses, and would not generate demand for school capacity.
- c. **Less than Significant Impact:** The project may generate a small amount of solid waste, such as asphalt concrete pavement removed during trenching. However, this material would be recycled. Solid waste generate by project construction would not exceed the County's 350 ton CEQA threshold for construction and demolition.
- d. **No Impact:** The proposed project does not include any residential or commercial development, and would not generate demand for sewage collection or related facilities.
- e. **No Impact:** The proposed project involves the construction of a storm drain to serve existing development, and impacts associated with these facilities are fully addressed in this Initial Study.

#### Mitigation and Residual Impact:

No mitigation is required. No cumulatively considerable or significant residual impacts are anticipated.

**4.14 RECREATION**

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

**Setting:**

Recreational facilities in the vicinity of the project site include Rocky Nook Park, Mission Historical Park and Skofield Park. In addition, the Tunnel Trail begins at the terminus of Tunnel Road. The Tunnel Trail is very popular and parking near the trailhead is inadequate, resulting in most trail users parking along the shoulder of Tunnel Road.

**Impact Discussion:**

- a. No Impact:** Project-related trenching in Tunnel Road would be conducted using standard traffic control leaving at least one lane open at all times. The proposed project would not limit access to the Tunnel Trail or otherwise conflict with existing recreational uses. The proposed construction area is signed “No Parking Any Time”; therefore, construction activities would not result in the loss of roadside parking or otherwise affect public access to the Tunnel Trail.
- b. No Impact:** see a. above.
- c. No Impact:** The project does not include residential land uses; therefore, it would not generate demand for recreational facilities or result in associated overuse.

**Mitigation and Residual Impact:**

No mitigation is required. No cumulatively considerable or residual impacts are anticipated.

**4.15 TRANSPORTATION/CIRCULATION:**

<b>Will the proposal result in:</b>	<b>Potentially Significant</b>	<b>Less than Significant with Mitigation</b>	<b>Less than Significant</b>	<b>No Impact</b>	<b>Reviewed Under Previous Document</b>
<b>a.</b> Generation of substantial additional vehicular movement (daily, peak-hour, etc.) in relation to existing traffic load and capacity of the street system?			X		

<b>Will the proposal result in:</b>	<b>Potentially Significant</b>	<b>Less than Significant with Mitigation</b>	<b>Less than Significant</b>	<b>No Impact</b>	<b>Reviewed Under Previous Document</b>
<b>b.</b> A need for private or public road maintenance, or need for new road(s)?				X	
<b>c.</b> Effects on existing parking facilities, or demand for new parking?				X	
<b>d.</b> Substantial impact upon existing transit systems (e.g. bus service) or alteration of present patterns of circulation or movement of people and/or goods?				X	
<b>e.</b> Alteration to waterborne, rail or air traffic?				X	
<b>f.</b> Increase in traffic hazards to motor vehicles, bicyclists or pedestrians (including short-term construction and long-term operational)?			X		
<b>g.</b> Inadequate sight distance?				X	
<b>h.</b> Inadequate ingress/egress?				X	
<b>i.</b> Inadequate general road capacity?				X	
<b>j.</b> Inadequate emergency access?				X	
<b>k.</b> Impacts to the Congestion Management Plan system?				X	

**Setting:**

Tunnel Road is classified as S-3, a secondary roadway designed to serve small to medium lots with a design capacity of 7,900 vehicles per day. The acceptable capacity of Tunnel Road is 5,530 vehicles per day, with a 2012 daily volume of 860 vehicles per day (Santa Barbara County, 2014). Tunnel Road operates at level of service A, which indicates smooth operation without congestion.

**Impact Discussion:**

- a. Less than Significant Impact:** Traffic control would be provided for trenching in Tunnel Road, including signage and flagmen as needed to ensure safe traffic flow through the construction area. Employee and materials transportation associated with project construction would generate a maximum of six average daily trips (12 round trips per day; 4 heavy-duty truck, 8 light-duty vehicles). Peak hour trips are expected to be less than four. Based on the lack of existing congestion, low trip generation associated with construction activities and proposed traffic control, significant congestion on Tunnel Road and its intersection with Orange Grove Avenue is not anticipated.
- b. No Impact:** The proposed project involves drainage improvements and would not result in a need for new roads or maintenance of existing roads.

- c. **No Impact:** Formal on-street parking is not provided on Tunnel Road or Orange Grove Avenue. The project would not generate long-term parking demand. Project construction-related (temporary) parking needs (up to four vehicles) would be likely accommodated on Orange Grove Avenue, which is currently signed “No Parking Any Time”. Therefore, project construction activities would not displace any current parking spaces.
- d. **No Impact:** The proposed project would not create a demand for transit or interfere with the existing transit system or circulation of people and goods.
- e. **No Impact:** The proposed project would not affect waterborne or rail traffic, and is not located in either clear zones or approach zones of any airport.
- f. **Less than Significant Impact:** As discussed under item a., temporary lane closure may be required on Tunnel Road during storm drain installation. Traffic controls would minimize construction-related traffic hazards to pedestrians, bicyclists and motorists using affected driveways. Implementation of standard County Public Works practices would ensure that impacts would be less than significant.
- g. **No Impact:** No change in sight distance would occur, the elevation of affected roadways would not modified by construction.
- h. **No Impact:** The proposed project would not affect ingress/egress to and from residential land uses along Tunnel Road and Orange Grove Avenue. Access to all land uses would be maintained during the construction period.
- i. **No Impact:** The proposed project would not affect roadway capacity.
- j. **No Impact:** Emergency access to residences along Tunnel Road and Orange Grove Avenue would not change. Traffic control would be used to maintain access during the construction period.
- k. **No Impact:** Roadways and intersections in the project area operate at acceptable levels of service and are not subject to Congestion Management Plan requirements.

**Mitigation and Residual Impact:**

No mitigation is required. No cumulatively considerable or significant residual impacts are anticipated.

**4.16 WATER RESOURCES/FLOODING:**

<b>Will the proposal result in:</b>	<b>Potentially Significant</b>	<b>Less than Significant with Mitigation</b>	<b>Less than Significant</b>	<b>No Impact</b>	<b>Reviewed Under Previous Document</b>
a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?			X		
b. Changes in percolation rates, drainage patterns or the rate and amount of surface water runoff?			X		

<b>Will the proposal result in:</b>	<b>Potentially Significant</b>	<b>Less than Significant with Mitigation</b>	<b>Less than Significant</b>	<b>No Impact</b>	<b>Reviewed Under Previous Document</b>
<b>c.</b> Change in the amount of surface water in any water body?				X	
<b>d.</b> Discharge, directly or through a storm drain system, into surface waters or alteration of surface water quality, including but not limited to temperature, dissolved oxygen, turbidity, or thermal water pollution?			X		
<b>e.</b> Alterations to the course or flow of flood waters, or need for private or public flood control projects?				X	
<b>f.</b> Exposure of people or property to water related hazards such as flooding (placement of project in 100 year flood plain), accelerated runoff or tsunamis, sea level rise or seawater intrusion?				X	
<b>g.</b> Alteration of the direction or rate of flow of groundwater?				X	
<b>h.</b> Change in the quantity of groundwaters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or recharge interference?				X	
<b>i.</b> Overdraft or over-commitment of any groundwater basin? Or, a significant increase in the existing overdraft or over-commitment of any groundwater basin?				X	
<b>j.</b> The substantial degradation of groundwater quality including saltwater intrusion?				X	
<b>k.</b> Substantial reduction in the amount of water otherwise available for public water supplies?			X		
<b>l.</b> Introduction of storm water pollutants (e.g., oil, grease, pesticides, nutrients, sediments, pathogens, etc.) into groundwater or surface water?			X		

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**Setting:**

**Surface Waters.** The Mission Creek watershed extends approximately 7.5 miles from the Santa Ynez Mountains to the ocean and covers approximately 7,400 acres. The National Forest encompasses 47 percent of the overall watershed. The main stem of Mission Creek extends from near La Cumbre Peak at the crest of the Santa Ynez Mountains south to the Pacific Ocean. Mission Creek has two primary tributaries; Las Canoas Creek and Rattlesnake Creek, which converge near Foothill Road (Route 192). Rattlesnake Creek forms about 27 percent of the watershed area.

Mission Creek winds its way through highly urbanized areas until it reaches the ocean east of Stearns Wharf. The tidal Mission Creek Lagoon at the creek mouth extends from just east of Stearns Wharf to Yanonali Street, approximately 2,100 feet upstream from the bottom of the lagoon. The size of the lagoon is dependent on the state of the sand berm restricting flow to the ocean, rainfall, and tides.

**Floodplain.** The project site is depicted on the National Flood Insurance Program Flood Insurance Rate Map panel 06083C1379H, which maps the area as an Area of Minimal Flood Hazard (Zone X).

**Groundwater.** The project site lies approximately 2,000 feet north of the Foothill Groundwater Basin, which encompasses approximately 4.5 square miles. The Santa Barbara Formation forms the principal aquifer of the basin and consists of mainly marine sand, silt and clay (Santa Barbara County Public Works Department, 2012). The City of Santa Barbara and the La Cumbre Mutual Water Company account for most of the groundwater extraction, and with active management the Basin is not considered to be in overdraft.

**Water Quality Regulation.** The Regional Water Quality Control Board (RWQCB) has developed a *Water Quality Control Plan for the Central Coast Region* (Basin Plan) (2011) to protect the water quality of surface and groundwaters of the region. The Basin Plan designates beneficial uses, sets narrative and numerical objectives to protect beneficial uses and describes implementation programs. Beneficial uses are processes, habitats, organisms or features that require water and are considered worthy of protection. Identified beneficial uses for Mission Creek include municipal water supply, groundwater recharge, water contact recreation, non-water contact recreation, wildlife habitat, cold freshwater habitat, warm freshwater habitat, migratory habitat, spawning habitat, rare species habitat, estuary habitat, freshwater replenishment, and commercial and sport fishing habitat. Mission Creek has been listed as impaired under Section 303(d) of the Clean Water Act for E. coli, fecal coliform, low dissolved oxygen and unknown toxicity.

**Impact Discussion:**

- a. **Less than Significant Impact:** The proposed storm drain outfall would terminate at the Mission Creek Debris Basin. However, the small surface area of the pipe as compared to the canyon bottom would prevent any meaningful changes in water movement.

- b. Less than Significant Impact:** The proposed storm drain would be located under an existing roadway or above-ground, such that no increase in impervious surfaces would occur, nor changes in rainfall percolation. No changes in topography are proposed that could affect drainage patterns. The proposed storm drain system would alter the drainage pattern of existing run-off from Tunnel Road and adjacent areas by concentrating flow into the Debris Basin. However, the affected area would be very small and would contribute to a negligible increase in storm run-off discharged to Mission Creek.
- c. No Impact:** As discussed in b. above, a very small amount of storm run-off that currently reaches Mission Creek by sheet flow would be directed to the Debris Basin by the proposed storm drain, and reduce local percolation. However, the change in surface flow in Mission Creek would be negligible.
- d. Less than Significant Impact:** As discussed above, the project-related change in storm run-off reaching Mission Creek would not substantially affect surface water quality. The storm drain outfall would discharge to the existing grouted rock rip-rap at the Debris Basin, minimizing erosion and siltation in Mission Creek.
- e. No Impact:** The purpose of the project is to provide flood control facilities and reduce the potential for local flooding. The project would not include any land use changes that would require additional flood control facilities.
- f. No Impact:** The proposed project does not include any habitable structures or other land use changes that would increase the exposure of people or property to flood hazards, sea level rise or seawater intrusion.
- g. No Impact:** The proposed project would not affect groundwater flow as project-related groundwater pumping would not occur, and recharge from Mission Creek would not be affected.
- h. No Impact:** The project does not involve extraction of groundwater, excavation of aquifers or interference with recharge.
- i. No Impact:** The project would not involve groundwater pumping.
- j. No Impact:** The proposed project would not contribute to seawater intrusion.
- k. Less than Significant Impact:** The project would not require a long-term source of water and would not affect public water supplies. Water to be used for construction (compaction, dust control) would be obtained from local fire hydrants (or similar potable source) and would represent a short-term negligible use of water supplies.
- l. Less than Significant Impact:** Storm run-off from Tunnel Road and adjacent land uses likely contributes pollutants to Mission Creek. The proposed project would not affect the type or volume of these pollutants generated, or substantially increase the discharge of these pollutants to Mission Creek.

#### **Mitigation Measures and Residual Impacts:**

No mitigation is required. No cumulatively considerable or significant residual impacts are anticipated.



## 5.0 INFORMATION SOURCES

### 5.1 COUNTY DEPARTMENTS CONSULTED

Public Works Department

### 5.2 COMPREHENSIVE PLAN (CHECK THOSE SOURCES USED):

<input checked="" type="checkbox"/>	Seismic Safety/Safety Element	<input checked="" type="checkbox"/>	Conservation Element
<input checked="" type="checkbox"/>	Open Space Element	<input checked="" type="checkbox"/>	Noise Element
<input type="checkbox"/>	Coastal Plan and Maps	<input checked="" type="checkbox"/>	Circulation Element
<input type="checkbox"/>	ERME	<input type="checkbox"/>	Agricultural Element

### 5.3 OTHER SOURCES (CHECK THOSE SOURCES USED):

<input checked="" type="checkbox"/>	Field work	<input type="checkbox"/>	Ag Preserve maps
<input type="checkbox"/>	Calculations	<input checked="" type="checkbox"/>	Flood Control maps
<input checked="" type="checkbox"/>	Project plans	<input checked="" type="checkbox"/>	Other technical references (reports, survey, etc.)
<input type="checkbox"/>	Traffic studies	<input type="checkbox"/>	Planning files, maps, reports
<input type="checkbox"/>	Records	<input checked="" type="checkbox"/>	Zoning maps
<input checked="" type="checkbox"/>	Grading plans	<input checked="" type="checkbox"/>	Soils maps/reports
<input type="checkbox"/>	Elevation, architectural renderings	<input type="checkbox"/>	Plant maps
<input type="checkbox"/>	Published geological map/reports	<input checked="" type="checkbox"/>	Archaeological maps and reports
<input checked="" type="checkbox"/>	Topographical maps	<input checked="" type="checkbox"/>	FEMA Floodplain maps
<input checked="" type="checkbox"/>	Important Farmland Maps	<input checked="" type="checkbox"/>	Mission Canyon Community Plan
		<input type="checkbox"/>	Hydraulic Report

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## 6.0 PROJECT SPECIFIC (SHORT- AND LONG-TERM) AND CUMULATIVE IMPACT SUMMARY

### 6.1 SIGNIFICANT UNAVOIDABLE IMPACTS

None identified.

### 6.2 SIGNIFICANT BUT MITIGABLE IMPACTS

**Biological Resources.** The proposed project may result in:

- Construction-related disturbance of nesting birds, including Cooper's hawk and yellow warbler.

**Cultural Resources.** The proposed project may result in:

- Potential disturbance of unknown buried cultural resources in an archeologically sensitive area.

**Fire Protection.** The proposed project may result in:

- Increased public fire hazard associated with construction work within highly flammable vegetation.

**Noise.** The proposed project may result in:

- Exposure of adjacent residences to temporary noise generated by heavy equipment and heavy-duty trucks.

### 6.3 CUMULATIVE IMPACTS

Cumulative impacts are defined as two or more individual effects which, when considered together are considerable, or which compound or increase other environmental impacts. Under Section 15064 of the State CEQA Guidelines, the lead agency (Santa Barbara County Public Works Department) must identify cumulative impacts, determine their significance and determine if the effects of the project are cumulatively considerable.

This assessment is focused on potential impacts of the project that may be less than significant on a project-specific basis, but potentially significant when viewed in combination with other projects in the region. Section 3.4 summarizes other projects recently approved or under review by the County within the project region (Mission Canyon/Montecito area) and City bridge replacement projects on Mission Creek.

#### 6.3.1 Air Quality

Other land development projects would generate both short-term construction emissions and long-term vehicle emissions. The proposed project would not contribute to cumulative long-term vehicle emissions, but may contribute to cumulative construction emissions, should construction of these projects occur at the same time as the proposed project. However, construction emissions of both the proposed project and other projects would be mitigated by standard measures required by the Santa Barbara County APCD.

Implementation of these measures is considered to prevent significant project-specific and cumulative air quality impacts from construction. Therefore, the incremental air quality impact associated with project construction would not be cumulatively considerable.

### 6.3.2 Water Resources

Most of the cumulative projects (see Section 3.4.1) would require potable water service and may affect groundwater supplies. The proposed project would not require a water supply and would not contribute to this impact. Cumulative development would increase pollutant concentrations in storm run-off and may adversely affect surface water quality. During the construction period, the proposed project may contribute to cumulative surface water quality impacts. However, standard construction storm water best management practices would be implemented and prevent substantial impacts to surface water quality.

Similar to the proposed project, some of the cumulative projects (see Section 3.4.2) are located at/near Mission Creek and inadvertent spills of fuel or lubricants could occur and percolate into groundwater supplies. The proposed project would contribute to this cumulative impact; however, standard construction storm water best management practices would be implemented and prevent substantial impacts to groundwater quality. The project's incremental contribution to groundwater impacts would not be considerable.

### 6.3.3 Biological Resources

**Sensitive Riparian Vegetation/ESHA.** City bridge projects would result in temporary impacts to sensitive riparian vegetation/ESHA. However, the proposed project would not contribute to this cumulative impact.

**Protected Trees.** Coast live oak trees are common in the project area, and other projects may result in removal of these trees. However, the proposed project would not contribute to this cumulative impact.

**Steelhead and Tidewater Goby.** City bridge replacement projects (see Section 3.4.2) would adversely steelhead migration habitat and goby habitat. However, the proposed project would not contribute to this cumulative impact.

**Cooper's Hawk and Yellow Warbler.** Construction of City bridge replacement projects (see Section 3.4.2) would result in potentially significant cumulative impacts to nesting birds. The proposed project may incrementally contribute to these cumulative impacts. However, implementation of proposed mitigation (BIO-1) would minimize these impacts such that the project's contribution would not be cumulatively considerable.

#### 6.3.4 Cultural Resources

Most cumulative projects summarized in Section 3.4 are located in previously developed areas and are unlikely to adversely affect intact archeological resources. However, some projects are located in potentially sensitive areas, that may result in disturbance of known or unknown cultural resources. The proposed project may impact unknown cultural resources along Mission Creek, and could contribute to a cumulative impact. However, mitigation measures are provided to avoid and minimize potential impacts to archeological resources. The project's incremental contribution to cumulative cultural resources impacts would not be considerable.

#### 6.3.5 Noise

Other projects would generate both short-term construction noise and long-term traffic noise. The proposed project would not contribute to cumulative long-term traffic noise, but may contribute to cumulative construction noise. However, the proposed project is not located in close proximity to other projects and/or would not be implemented at the same time, and would not have a considerable contribution to cumulative impacts at noise sensitive receptors affected by these projects.



## 7.0 MANDATORY FINDINGS OF SIGNIFICANCE

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

### Discussion of Findings:

1. The proposed project has the potential to substantially degrade the quality of the environment. However, implementation of mitigation measure BIO-1 would ensure impacts to nesting birds would be minimized, and prevent fish or wildlife populations from dropping below self-sustaining levels. Due to the small scale of project impacts, it would not threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal.

Based on an archeological survey conducted for the project, no impacts to cultural resources are anticipated. However, mitigation measure AR-1 is provided to minimize disturbance of any discovered cultural resources. The proposed project would not eliminate important examples of the major periods of California history or prehistory.

2. The proposed project does not have the potential to achieve short-term to the disadvantage of long-term environmental goals. The proposed project is designed to achieve the long-term goal of the Flood Control District to reduce the potential for flooding of Tunnel Road.
3. The proposed project may contribute to cumulative impacts, but its incremental contribution would not be substantial or result in cumulatively significant impacts.
4. The proposed project may create environmental effects which would cause substantial adverse effects on human beings, including fire hazards and noise. However, mitigation measures have been provided (see FIRE-1 and NOISE-1) to reduce these impacts to a level of less than significant.
5. There is no disagreement supported by facts or any reasonable assumptions predicated upon facts and/or expert opinion supported by facts over the significance of an effect which would warrant investigation in an EIR.

## **8.0 PROJECT ALTERNATIVES**

No significant, adverse unmitigable impacts were identified; therefore, no project alternatives were considered.

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

An analysis of the consistency of the proposed project with applicable policies of the Santa Barbara County Comprehensive Plan and Mission Canyon Community Plan is provided in Tables 8 and 9. The proposed project, with mitigation, is expected to be consistent with all existing land use and development policies.

**Table 8. Policy Consistency Analysis – Comprehensive Plan**

<b>Applicable Policy Number</b>	<b>Issue</b>	<b>Consistency</b>
Land Use: Hillside & Watershed Protection 1	Development shall minimize cut and fill operations.	Potentially Consistent: the proposed storm drain outfall would be secured to the slope using cables, cut or fill operations are not required.
Land Use: Hillside & Watershed Protection 2	Development shall be designed to fit site topography and preserve natural features, landforms and native vegetation.	Potentially Consistent: the proposed outfall would be secured to the slope with cables with minimal change to local topography. In addition, soil disturbance and loss of native vegetation would be minimized by laying the pipe on the soil surface.
Land Use: Streams & Creeks 1	All permitted construction and grading within stream corridors shall be carried out in such a manner as to minimize impacts from increased run-off, sedimentation, biochemical degradation or thermal pollution	Potentially Consistent: construction work within Mission Creek would be limited to the placement of a pre-cast concrete cradle on the existing rock rip-rap. If any work occurs during the wet season, best management practices would be implemented to minimize run-off of turbid storm water to Mission Creek.
Land Use: Flood Hazard 1	All development, including construction, excavation and grading, except flood control projects shall be prohibited in the floodway.	Potentially Consistent: the project is a flood control project designed to improve public safety. The proposed storm drain outfall would not substantially impede floodwaters or result in an increase in floodwater elevations.

**Table 9. Policy Consistency Analysis – Mission Canyon Community Plan**

<b>Applicable Policy Number</b>	<b>Issue</b>	<b>Consistency</b>
LU-MC-4 & DevStd LU-MC-4.1	Protect the public from continuous noise by shielding stationary equipment	Potentially Consistent: stationary construction equipment such as generators and compressors would be equipped with standard acoustic shielding
DevStd CIRC-MC-12.2	All construction-related vehicle and equipment parking shall be located onsite or at a designated off-site location	Potentially Consistent: project construction parking would occur primarily on Orange Grove Avenue and avoid the Tunnel Road right-of-way, to the extent feasible.
DevStd PS-MC-3.1	Recycling bins shall be provided at all construction sites to facilitate recovery of currently accepted recyclable construction materials.	Potentially Consistent: due to the small amount of recyclable material anticipated to be generated and limited working space, a recycling bin would not be practical. However, recyclable construction materials would be collected on-site, and transported to a recycling facility upon the completion of construction.
DevStd BIO-MC-3.4	Where development cannot be sited to avoid ESH, development shall protect sensitive habitat areas to the maximum extent feasible.	Potentially Consistent: the proposed storm drain outfall would be located within ESH, but would be located above-ground to minimize removal of vegetation and habitat. No loss of riparian vegetation within the Mission Creek ESH corridor would occur.

**Table 9. Continued**

<b>Applicable Policy Number</b>	<b>Issue</b>	<b>Consistency</b>
DevStd BIO-MC-3.9	All construction activity, including staging areas, storage and vehicles shall avoid disturbance to the ESH or ESH buffer areas.	Potentially Consistent: construction activity would primarily occur within the Tunnel Road right-of-way and Orange Grove Avenue. Work within the ESH would be limited to very minor soil movement on the slope conducted using hand tools. Staging and storage of materials and vehicles may occur east of the Debris Basin but would be limited to a disturbed area not supporting native vegetation.
DevStd BIO-MC-8.1	Development shall be setback a minimum of 50 feet from the geologic top of bank of any stream or creek or outside edge of riparian vegetation.	Potentially Consistent: the project consists of a new storm drain that must empty into Mission Creek, and not a change in land use (development). Therefore, setbacks are not feasible.
DevStd BIO-MC-8.2	The stream or creek buffer area shall be indicated on all site and grading plans.	Potentially Consistent: the buffer area will be shown on the final plans.
DevStd BIO-MC-8.4	No structures shall be located within a stream corridor except public trails, flood control projects required for public safety and/or to protect habitable structures, or other development to improve fish and wildlife habitat.	Potentially Consistent: the project consists of a new storm drain that would improve public safety by reducing the potential for flooding of Tunnel Road.
DevStd BIO-MC-11.1	Development shall not interrupt major wildlife movement corridors.	Potentially Consistent: Mission Canyon may be considered a major wildlife movement corridor, but the project would not include any barriers or other features that would hinder wildlife movement.
DevStd BIO-MC-12.1	A mitigation plan shall be submitted to minimize impacts to nesting birds.	Potentially Consistent: mitigation measure BIO-1 is provided to avoid significant impacts to nesting birds.
DevStd FLD-MC-1.1	Development shall not be allowed within floodways.	Potentially Consistent: the project consists of a new storm drain that must empty into Mission Creek, within the floodway. The proposed storm drain outfall would not substantially impede floodwaters or result in an increase in floodwater elevations.
DevStd FLD-MC-2.2	Drainage outlets into creek channels shall cause flow to approximate the general direction of natural stream flow, and include energy dissipaters.	Potentially Consistent: the proposed flared end of the outfall pipe would approximate the direction of stream flow. Since the storm drain would empty onto existing grouted rock rip-rap, a project-specific energy dissipater is not needed.
DecStd FLD-MC-2.3	Excavation and grading shall be limited to the dry season unless all measures required by the County Grading Ordinance are in effect.	Potentially Consistent: the proposed project is planned to be constructed in the dry season. If the construction schedule is delayed and work occurs during the rainy season, storm water best management practices required by the Grading Ordinance would be implemented.
DecStd GEO-MC-1.1	Development, including grading shall be prohibited on slopes greater than 30%.	Potentially Consistent: the proposed storm drain outfall would be located on a slope exceeding 50%, but would not require grading or trenching on the slope.

**Table 9. Continued**

<b>Applicable Policy Number</b>	<b>Issue</b>	<b>Consistency</b>
DecStd GEO-MC-1.2	Landscape plans shall be required for development on slopes 20% or greater.	Potentially Consistent: the proposed storm drain outfall would be located on a slope exceeding 50%, which supports native vegetation and is not feasible to landscape.
DevStd GEO-MC-2.2	Temporary erosion control measure using best management practices shall be used to minimize erosion related to construction.	Potentially Consistent: best management practices will be implemented to minimize construction-related erosion.
DevStd HA- MC-1.1	A Phase I archeological survey shall be performed.	Potentially Consistent: a Phase I archeological survey was conducted and a report was prepared for the project.
DevStd VIS MC-1.1	Development shall be sited and designed to minimize the obstruction or degradation of views from public places.	Potentially Consistent: the proposed above-ground storm drain outfall would not be visible from public places.

### 9.0 RECOMMENDATION BY LEAD AGENCY STAFF

On the basis of the Initial Study, lead agency staff:

Finds that the proposed project WILL NOT have a significant effect on the environment and, therefore, recommends that a Negative Declaration (ND) be prepared.

Finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures incorporated into the REVISED PROJECT DESCRIPTION would successfully mitigate the potentially significant impacts. Staff recommends the preparation of a Mitigated Negative Declaration (MND). The MND finding is based on the assumption that mitigation measures will be acceptable to the applicant; if not acceptable a revised Initial Study finding for the preparation of an EIR may result.

Finds that the proposed project MAY have a significant effect on the environment, and recommends that an EIR be prepared.

Finds that from existing documents (previous EIRs, etc.) that a subsequent document (containing updated and site-specific information, etc.) pursuant to CEQA Sections 15162/15163/15164 should be prepared.

Potentially significant unavoidable adverse impact areas: None

With Public Hearing  Without Public Hearing

PROJECT EVALUATOR: Matt Ingamells, Padre Associates

DATE: April 15, 2016

### 10.0 DETERMINATION BY ENVIRONMENTAL HEARING OFFICER

I agree with staff conclusions. Preparation of the appropriate document may proceed.

I DO NOT agree with staff conclusions. The following actions will be taken:

I require consultation and further information prior to making my determination.

SIGNATURE: \_\_\_\_\_ INITIAL STUDY DATE: \_\_\_\_\_

SIGNATURE: af DRAFT ND DATE: 5/2/14

SIGNATURE: \_\_\_\_\_ REVISION DATE: \_\_\_\_\_

SIGNATURE: af FINAL MND DATE: 6/15/14



## **APPENDIX A**

### **PUBLIC COMMENTS AND RESPONSES**

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**APPENDIX A**  
**COMMENT LETTERS RECEIVED ON THE PROPOSED**  
**MITIGATED NEGATIVE DECLARATION**

<u>Party</u>	<u>Date</u>
1. Ron & Sally Burns, 1407 Tunnel Road, Santa Barbara	Undated
2. Howard B. Schiffer, Mission Canyon, Santa Barbara	May, 13, 2016
3. Stephen Henry, U.S. Fish and Wildlife Service	May 23, 2016
4. Krista Nightingale, Santa Barbara County Air Pollution Control District	June 10, 2016

Burns

CIELO ALTO, 1407 TUNNEL RD  
SANTA BARBARA, CA 93105

Ronald S. Burns

Dear Sir/Madam —

I am writing with full support  
and appreciation for the proposed  
creation of a Debris Basin Storm Drain  
on Tunnel Rd. We have had extremely  
difficult and yes frightening experiences  
with the amount of debris/water —  
and thank you for your efforts!

Ron + Sally Burns

**Commenter:** Ron & Sally Burns, 1407 Tunnel Road, Santa Barbara

**Date:** undated

**Response:**

This comment expresses support for the project, and does not address the adequacy of the proposed MND. No response is necessary.

## Matt Ingamells

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**From:** howardschiffer@gmail.com on behalf of Howard Schiffer  
<hschiffer@vitaminangels.org>  
**Sent:** Friday, May 13, 2016 12:04 PM  
**To:** Spencer, Maureen  
**Cc:** Kim Schiffer  
**Subject:** Orange Grove / Tunnel Road Proposed Mission Creek Debris Basin Storm Drain

**Subject: Orange Grove / Tunnel Road Proposed Mission Creek Debris Basin Storm Drain (16NGD-00000-00007)**

Hi Maureen, This email is in support of the proposed **Mission Creek Debris Basin Storm Drain**, that the Orange Grove neighbors have been working on with the County for some time now. Kim and I are personally very excited to see this project moving forward. As drainage has been a major concern for us and many of our neighbors in Upper Mission Canyon, and as this proposed completion of the existing (and incomplete) storm drain on Orange Grove Avenue will serve to route a potential large volume of water into Mission Creek (and away from personal property where it could do considerable damage), we are in complete support of this project. We thank you all for moving this forward. Sincerely, Howard & Kim Schiffer

--

Howard B. Schiffer  
Founder and President  
Vitamin Angels  
post office box 4490  
santa barbara, ca 93140  
phone: 805-456-5125  
fax: 805-564-8499  
[vitaminangels.org](http://vitaminangels.org)



Connect with Vitamin Angels:



**Commenter:** Howard B. Schiffer, Mission Canyon, Santa Barbara

**Date:** May 13, 2016

**Response:**

This comment expresses support for the project, and does not address the adequacy of the proposed MND. No response is necessary.



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Ventura Fish and Wildlife Office  
2493 Portola Road, Suite B  
Ventura, California 93003

IN REPLY REFER TO:  
08EVEN00-2016-CPA-0111

May 23, 2016

Maureen Spencer  
Project Manager  
Santa Barbara County Flood Control & Water Conservation District  
130 E. Victoria Street, Suite 200  
Santa Barbara, California 93101

Subject: Draft Mitigated Negative Declaration for the Proposed Mission Creek Debris Basin Storm Drain, Santa Barbara County, California

Dear Ms. Spencer:

We have reviewed the Draft Mitigated Negative Declaration for the proposed Mission Creek Debris Basin Storm Drain Project. The Santa Barbara County Flood Control & Water Conservation District plans to install a new storm drain to connect an existing storm drain outlet to the Mission Creek Debris Basin. The storm drain would be installed in the Mission Canyon community of Santa Barbara County.

The U.S. Fish and Wildlife Service's (Service) mission is to conserve and protect the Nation's fish and wildlife resources and their habitats. To assist in meeting this mandate, the Service provides comments on public notices issued for projects that may have an effect on those resources, especially federally-listed plants and wildlife. The Service's responsibilities also include administering the Endangered Species Act of 1973, as amended (Act). Section 9 of the Act prohibits the taking of any federally listed endangered or threatened wildlife species. "Take" is defined at Section 3(19) of the Act to mean "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." The Act provides for civil and criminal penalties for the unlawful taking of listed wildlife species. Such taking may be authorized by the Service in two ways: through interagency consultation for projects with Federal involvement pursuant to section 7, or through the issuance of an incidental take permit under section 10(a)(1)(B) of the Act.

Our review of the proposed project indicates that the area that would be affected may support the following listed species:

<u>Common name</u>	<u>Scientific Name</u>	<u>Threatened or Endangered</u>
California red-legged frog	<i>Rana draytonii</i>	Threatened

We recommend that focused surveys for this species be conducted as soon as possible in the appropriate season, following acceptable protocols, if they have not already been completed. If

Maureen Spencer

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this species is detected or is known to be present in the project area, you should contact us to help determine what measures may be appropriate to conserve the species and its habitats. We can also provide guidance on the steps that may be needed to comply with the Act.

If you have any questions, please contact Collette Thogerson of my staff at (805) 644-1766, or by e-mail at [collette\\_thogerson@fws.gov](mailto:collette_thogerson@fws.gov).

Sincerely,



Stephen P. Henry  
Field Supervisor



**Commenter:** Stephen Henry, U.S. Fish and Wildlife Service

**Date:** May 23, 2016

**Response:**

Based on literature research and field experience in the region, California red-legged frog has not been reported from the Mission Creek watershed. In addition, the proposed project would not impact suitable habitat for this species, as the storm drain outlet would be located on grouted rock rip-rap. However, as part of compliance with a Streambed Alteration Agreement issued by the California Department of Fish and Wildlife, pre-construction field surveys would be completed for California red-legged frog.



**Santa Barbara County  
Air Pollution Control District**

Our Vision  Clean Air

June 10, 2016

Maureen Spencer  
Santa Barbara County  
Flood Control District  
123 E. Anapamu Street  
Santa Barbara, CA 93101

**Re: APCD Comments on Mission Creek Debris Basin Storm Drain, 16NGD-00000-00007**

Dear Ms. Spencer:

The Air Pollution Control District (APCD) has reviewed the Draft Mitigated Negative Declaration (MND) for the Mission Creek Debris Basin Storm Drain. The project consists of the construction of a storm drain pipe to connect the terminus of the private storm drain to Mission Creek. Mission Creek is an intermittent stream that drains the Santa Ynez Mountains and the proposed storm drain will be constructed 1.1 miles upstream of the 192 crossing. The project is located at the Orange Grove Avenue/Tunnel Road intersection in the unincorporated Santa Barbara area.

Air Pollution Control District staff offers the following comment on the MND:

1. **Section 4.3 Air Quality, Setting, Air Pollutant Thresholds, page 19:** A threshold of significance is stated as *"emit less than 25 pounds per day of NOx and ROC from motor vehicles."* Please correct this threshold to say *"emit more than 25 pounds per day..."*.

If you or the project applicant have any questions regarding these comments, please feel free to contact me at (805) 961-8893 or via email at [NightingaleK@sbcapcd.org](mailto:NightingaleK@sbcapcd.org).

Sincerely,

Krista Nightingale  
Air Quality Specialist  
Technology and Environmental Assessment Division

cc: Matt Ingamells, Padre Associates  
TEA Chron File

**Commenter:** Krista Nightingale, Santa Barbara County Air Pollution Control District

**Date:** June 10, 2016

**Response:**

The requested text change in Section 4.3 has been included in the Final MND.