COUNTY OF SAN MATEO PLANNING AND BUILDING DEPARTMENT

DATE: September 9, 2020

- TO: Planning Commission
- **FROM:** Planning Staff
- **SUBJECT:** <u>EXECUTIVE SUMMARY</u>: (1) Certification of an Environmental Impact Report, pursuant to the California Environmental Quality Act, (2) Acceptance of the Mitigation Monitoring and Reporting Program and Statement of Findings of Significant Impacts and Rejection of Alternatives, and (3) Consideration of a Coastal Development Permit, pursuant to Sections 6328.4 and 6353 of San Mateo County Zoning Regulations, for the Department of Public Works and County Parks' Five-year Master Permit for the County's Routine Maintenance Program at Countymaintained parks and facilities. Primary on-going activities include culvert, bridge, and other storm drainage maintenance; roadside ditch and swale maintenance; sediment removal; bank stabilization; vegetation management; and trail and road maintenance.

County File Number: PLN 2020-00119

PROPOSAL

The Department of Public Works (DPW) maintains County facilities and infrastructure including roadways and associated roadway shoulder areas, roadside ditches, ditch relief culverts, bridges, and green infrastructure stormwater facilities. Department of Public Works also manages vegetation at small municipal airports including the Half Moon Bay Airport and San Carlos Airport, and closed landfills including the Pescadero Landfill and Half Moon Bay Landfill. The Parks Department (County Parks) maintains various park and recreational facilities, including trails and campgrounds. The purpose of the proposed Routine Maintenance Program (RMP) is to provide the County (DPW and County Parks) a more comprehensive and consistent approach to conducting routine maintenance activities. The Maintenance Program, in brief, has seven primary activities: (1) culvert repairs (up to 28 culvert replacement projects in a given year), bridge (up to eight bridge maintenance projects in a given year) and other storm drainage maintenance; (2) roadside ditch and swale maintenance (occurs approximately 66 days per year); (3) sediment removal (on average five channel sediment removal projects per year up to a maximum of ten channel sediment removal projects per year); (4) bank stabilization (the total annual work distance along streambanks would not exceed 1,500 feet for all sites); (5) vegetation management; (6) road and trail maintenance; and (7) marina maintenance activities.

RECOMMENDATION

Staff recommends that the Planning Commission: (1) certify the Final Environmental Impact Report (FEIR) as complete, correct, adequate and prepared in accordance with the California Quality Act (CEQA); (2) accept the Mitigation Monitoring and Reporting Program, and Statement of Findings of Significant Impacts and Rejection of Alternatives; and, (3) approve the Coastal Development Permit, County File Number PLN 2020-00119, by adopting the required findings and conditions of approval in Attachment A.

SUMMARY

The proposed project has been reviewed for consistency with the Local Coastal Program (LCP) and General Plan policies, specifically with respect to Vegetative, Water, Fish, and Wildlife Resources, Soil Resources, Visual Quality, Historical and Archaeological Resources, Park and Recreation Resources, General Land Use, Urban Land Use, Rural Land Use, Transportation, Natural Hazards, and Man-Made Hazards. The proposed project is consistent with all applicable LCP policies as contained in the Locating and Planning New Development, Public Works, Sensitive Habitats, Visual Resources, Hazards, Recreation/Visitor-serving Facilities, and Public Access, components of the Local Coastal Program. The proposed project also meets all applicable zoning regulations.

The County prepared and circulated a Draft Environmental Impact Report (DEIR) for a 45-day public review period, pursuant to the California Quality Act (CEQA). The Environmental Impact Report determined that the proposed RMP has the potential to result in significant Air Quality, Biological Resources, Hazards, and Noise impacts, but that required mitigation measures will reduce potential impacts to less-than-significant levels. Comments on the DEIR were received and the County prepared responses to comments. The County distributed the Final EIR on August 24, 2020 to all those individuals and reviewing agencies that commented on the Draft Environmental Impact Report. The Final EIR is to be certified by the Planning Commission at its public hearing on September 9, 2020.

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- **SUBJECT:** (1) Certification of an Environmental Impact Report, pursuant to the California Environmental Quality Act, (2) Acceptance of the Mitigation Monitoring and Reporting Program and Statement of Findings of Significant Impacts and Rejection of Alternatives, and (3) Consideration of a Coastal Development Permit, pursuant to Section 6328.4 of the County Zoning Regulations, for the Department of Public Works and County Parks Five-year Master Permit for the County's Routine Maintenance Program at County-maintained parks and facilities. Primary on-going activities include culvert, bridge, and other storm drainage maintenance; roadside ditch and swale maintenance; sediment removal; bank stabilization; vegetation management; and trail and road maintenance.

County File Number: PLN 2020-00119

PROPOSAL

The Department of Public Works (DPW) maintains County facilities and infrastructure including roadways and associated roadway shoulder areas, roadside ditches, ditch relief culverts, bridges, and green infrastructure stormwater facilities. The Department of Public Works also manages vegetation at small municipal airports including the Half Moon Bay Airport and San Carlos Airport, and closed landfills including the Pescadero and Half Moon Bay Landfills. The Parks Department (County Parks) maintains various park and recreational facilities, including trails and campgrounds. The purpose of the proposed Routine Maintenance Program (RMP) is to provide the County (DPW and County Parks) a more comprehensive and consistent approach to conducting routine maintenance activities. The Routine Maintenance Program, in brief, has seven primary activities: (1) culvert repairs (up to 28 culvert replacement projects in a given year), (2) bridge and other storm drainage maintenance (up to eight bridge maintenance projects in a given year); (3) roadside ditch and swale maintenance (occurs approximately 66 days per year); (4) sediment removal (up to a maximum of ten channel sediment removal projects per year); (5) bank stabilization (the total annual work distance along streambanks would not exceed 1,500 feet for all sites); (6) vegetation management (e.g., mowing, fuel management, trimming and pruning, hazard tree removal, weed control/herbicide application, burn piles, and downed trees); (7) road and trail maintenance; and (8) Coyote Point marina maintenance activities (e.g., pump out

facility, docks, water lines, hazardous logs removal, wood pilings, rock rip-rap/berm, and boat launch ramp) (see Attachment E, Summary of Maintenance Program and Attachment K, link to RMP Manual on DPW webpage).

Approval of the proposed RMP will allow the County to continue its routine maintenance with the added benefit of evaluating potential impacts of the maintenance activities in a comprehensive manner, rather than requiring separate permits for individual projects. This approach will also facilitate shortened response times for individual repair projects and ensure the implementation of consistent best management practices, mitigation measures, and the protection of resources countywide.

RECOMMENDATION

- 1. That the Planning Commission certify the Final Environmental Impact Report (FEIR) as complete, correct, adequate and prepared in accordance with the California Environmental Quality Act (CEQA).
- 2. That the Planning Commission accept the Mitigation Monitoring and Reporting Program, and Statement of Findings of Significant Impacts and Rejection of Alternatives in support of the Findings.
- 3. That the Planning Commission approve the Coastal Development Permit, County File Number PLN 2020-00119, by adopting the required findings and conditions of approval in Attachment A.

BACKGROUND

Report Prepared By: Renée Ananda, Project Planner

Applicant: San Mateo County Department of Public Works and Parks Department

Owner: San Mateo County

Location: Countywide

APN(s): Various, Unincorporated Coastal Zone

Size: The proposed RMP will be implemented throughout the County of San Mateo which spans approximately 744 square miles.

Existing Zoning: Various within Unincorporated Coastal Zone of San Mateo County

General Plan Designation: Various

Local Coastal Plan Designation: Various

Sphere-of-Influence: Multiple

Existing Land Use: Multiple

Environmental Evaluation: The Department of Public Works prepared and circulated a Draft Environmental Impact Report (DEIR) for 45-day public review period, February 25, 2020 to April 10, 2020 pursuant to the California Environmental Quality Act ("CEQA"). The Department of Public Works prepared responses to comments received and on August 24, 2020, distributed the Final EIR (Attachment K) to all those individuals and reviewing agencies that commented on the Draft Environmental Impact Report. The DEIR identifies potentially significant but mitigable impacts related to Air Quality, Biological Resources, Hazards and Hazardous Materials, Noise, and Cumulative Biological Resources effects. No significant and unavoidable impacts were identified in the Draft Environmental Impact Report. The project with mitigation measures will not result in significant impacts to the environment as determined by the environmental review and presented in the Environmental Impact Report (EIR) (see Attachments F and K). The Planning Commission is to consider certification of the Final EIR. acceptance of the Mitigation Monitoring and Reporting Program and Statement of Findings of Significant Impacts and Rejection of Alternatives (Attachments B and C) in support of the Findings, and approval of the Coastal Development Permit at its public hearing on September 9, 2020.

Setting: The proposed Routine Maintenance Program will be implemented throughout San Mateo County. The County is geographically divided by the Santa Cruz Mountains into Bayside (east of the mountain ridges and bordering San Francisco Bay) and Coastside (west of the mountain ridges and bordering the Pacific Ocean), which is further divided by the Coastal Zone Boundary (**Attachment D**). Bayside areas drain into San Francisco Bay while Coastside areas drain to the Pacific Ocean. Many areas that will be covered by the RMP ("project sites") are located in unincorporated areas of the County, however, there are also project sites located within County-maintained locations in incorporated areas of the County. The setting is variable, and predominantly for DPW, includes roadways and associated roadway shoulder areas, roadside ditches, ditch relief culverts, bridges, and green infrastructure stormwater facilities. Maintenance activities include vegetation management at small municipal airports, such as Half Moon Bay Airport and San Carlos Airport, and closed landfills including the Pescadero and Half Moon Bay Landfills. Other project locations include County-owned park and recreational facilities, including trails and campgrounds. Chronology:

Date		Action
January 7, 2019	-	30-day scoping period and Notice of Preparation for EIR distributed. Scoping ended on February 5, 2019.
January 29, 2019	-	Scoping meeting held to receive comments from the interested parties, including the public, responsible agencies, and trustee agencies.
February 25, 2020	-	Department Public Works (Lead Agency) published DEIR for 45-day public review pursuant to the California Environmental Quality Act.
March 10, 2020	-	Public meeting to discuss DEIR and receive public comments.
March 19, 2020	-	Coastal Development Permit application submitted.
April 7, 2020	-	Application deemed complete.
April 10, 2020	-	DEIR Public Comment period closed.
August 24,2020	-	Final Environmental Impact Report published and distributed.
September 9, 2020	-	Planning Commission public meeting to consider certification of the FEIR, adoption of the Mitigation Monitoring and Reporting Program, and Statement of Findings of Significant Impacts and Rejection of Alternatives, and Coastal Development Permit approval.
DISCUSSION		

DISCUSSION

A. <u>KEY ISSUES</u>

1. <u>Conformance with the General Plan</u>

Staff has reviewed the proposed project and found that it complies with all applicable County General Plan policies, specifically:

a. Vegetative, Water, Fish and Wildlife Resources Policies

General Plan Policy 1.8 (*Definition of Sensitive Habitats*) defines a sensitive habitat as any area where the vegetative, water, fish and wildlife resources provide especially valuable and rare plant and animal habitats that can be easily disturbed or degraded. Policy 1.28

(*Regulate Development to Protect Sensitive Habitats*) regulates land uses and development activities adjacent to sensitive habitats in order to protect rare, endangered and unique plants and animals from reduction in their range or degradation of their environment and protect and maintain the biological productivity of important plant and animal habitats.

The Draft Environmental Impact Report prepared for the proposed project identifies twenty-two land uses/habitat types within the program area (Attachment D). These habitats contain a wide-variety of natural communities, and due to the expansive program area, they are grouped into nine general categories: aquatic/wetland, beaches/dunes/coastlines, forest/woodland, riparian, scrub/shrubland, grasslands, urban, cropland, and barren. The County will implement the proposed RMP throughout the County covering two zones identified for the program, Bayside (east of the mountain ridges and bordering San Francisco Bay) and Coastside (west of the mountain ridges and bordering the Pacific Ocean). The Coastside is divided by the Coastal Zone Boundary. A number of bayside watercourses drain the eastern part of the county including San Bruno Creek and Colma Creek. Streams draining the western county include Frenchman's Creek, Pilarcitos Creek, Naples Creek, Arroyo de en Medio, and Denniston Creek. These streams originate along the northern spur of the Santa Cruz Mountains that run through the county. The northern and north-east parts of the county are densely populated with urban and suburban areas. The south and the west central parts of the county are less densely populated and have more rural and coastal beach areas.

The proposed RMP is comprehensive and includes routine maintenance activities for a wide range of facilities. Best Management Practices (BMPs) are incorporated into the project and measures are proposed to mitigate potential significant impacts identified in the Draft Environmental Impact Report. The County's proposed RMP will continue required maintenance of culverts, storm drainage facilities, channels, bridges, roadside ditches, green infrastructure, creek bank stabilization, vegetation management (e.g., mowing, fuel management, trimming and pruning, hazard tree removal, weed control/herbicide application, burn piles, and downed trees) (**Attachment J**, page 6), roads and trails, and marina facilities (e.g., pump out facility, docks, water lines, hazardous logs removal, wood pilings, rock rip-rap/berm, and boat launch ramp).

The Department of Public Works consulted with several regulatory agencies and developed a three-tiered approach to address the proposed RMP's potential to result in adverse impacts on sensitive resources, including federally-listed animal species and habitats. The tiered approach will be implemented for ground-disturbing maintenance work/activities that the County Biologist will assign to a tier. Tier One maintenance activities have no impact and are primarily located in the following areas: (1) on beaches and in portions of creeks that are inaccessible to federally-listed fish or, for terrestrial special-status species other than birds, (2) areas where no suitable breeding habitat is present, and (3) areas that have no connectivity between the site and known or potential breeding habitat.

Tier Two maintenance activities are low impact activities that would be conducted in areas where federally-listed species are known to occur or could possibly occur, either because suitable breeding habitat is present or, for terrestrial species and fish, suitable non-breeding habitat is present and there is connectivity between the project site and suitable breeding habitat. Activities designated as Tier Two have the potential to result in impacts that can be mitigated through the implementation of avoidance and minimization measures (e.g., preconstruction surveys, exclusion of individuals from the project site, and/or implementation of non-disturbance buffers). Tier Two activities will not result in permanent loss of habitat; therefore, no compensatory mitigation would be required.

Tier Three maintenance activities have the potential to result in moderate/high impacts. Tier Three activities are those that would be conducted in areas where federally-listed species are known to occur or could possibly occur. Tier Three projects, for example, could include culvert replacement projects in Coastside streams known for salmonid habitat or sediment removal projects in California red-legged frog habitat. Tier Three projects will require standard BMPs and avoidance measures, and possibly an on-site biologist; as well as compensatory mitigation of permanent impacts on sensitive species and/or habitat. BMPs specifically for biological resources are provided in Table 2-5 of the DEIR, which lists comprehensive, focused BMPs to ensure that the proposed RMP will avoid or minimize impacts to biological resources. (Attachment H).

The RMP will allow the County to properly maintain its facilities while providing clear, appropriate, guidance to ensure the protection of special-status species and their habitat. Best Management Practices will be implemented as part of each maintenance project to minimize impacts to water quality, provide erosion control and revegetation on disturbed soils, preserve and promote growth of native vegetation, discourage propagation of non-native plants, and provide large woody debris for in-stream aquatic habitat. Maintenance of parks and other county-maintained areas includes the removal of invasive plant species.

The DEIR found that the proposed RMP has the potential to result in significant but mitigable effects on special-status plant and or animal species, riparian habitat or other sensitive natural communities and wetlands. Activities associated with the RMP could interfere with wildlife movement, established wildlife corridors, and some activities will be located within 200 feet of a marine or wildlife reserve. Staff is recommending conditions of approval which will require implementation of DEIR mitigation measures BIO 1 through BIO 9 to mitigate for these impacts. The proposed RMP, as mentioned above, incorporates BMP BIO-1 through BMP BIO-24 contained in Table 2-5 of the DEIR for the protection of biological resources. The RMP provides mitigation in a strategic and integrative manner that targets County areas which could benefit from habitat enhancement, restoration, and/or preservation. The RMP is therefore consistent with General Plan policy 1.28.

b. Soil Resources

Policy 2.1 (*Protect and Preserve Soil as a Resource*) provides for the protection of soil as a resource to sustain healthy plant, animal, and human life, which ensures that good quality soil remains available within San Mateo County. Policies 2.2 (*Minimize Soil Erosion*), 2.3 (*Prevention of Soil Contamination*), and 2.4 (*Protection of Productive Soil Resources*) all provide for the protection of soil resources. Respectively they require the use of conservation practices to minimize erosion, and the appropriate use, storage, and disposal of toxic substances. The General Plan's soil resources policies, overall, require that soil productivity be protected from abuse, misuse, and degradation. Policy 2.17 (*Regulate Development to Minimize Soil Erosion and Sedimentation*) regulates development to minimize soil erosion and sedimentation including, but not limited to, minimizing removal of vegetative cover.

Steeper areas of the County's unincorporated areas are susceptible to rapid erosion if not properly maintained. Routine maintenance on unpaved roads (such as two miles of the upper portion of Gazos Creek) to reduce and prevent erosion in watershed lands is an important step that minimizes the amount of downstream sediment impacts. The County maintains unpaved service roads, including Park roads and access roads for flood control facilities so that access is available year-round for inspections and emergency response purposes; and to minimize adverse water quality effects from erosion and sedimentation to nearby water bodies.

The DEIR identifies/describes many soil types that occur throughout the countywide project area. Many types of soils that are, to varying degrees, susceptible to erosion by water and wind, for example, occur in the Santa Cruz Mountains headwaters and upper watersheds. Along drainages and creek channels (e.g., San Mateo Creek, Easton Creek, and Mills Creek) soils are well-drained with very high runoff and are highly susceptible to erosion by wind and moderately susceptible to erosion by water. Other areas such as the steep slopes within the upper watersheds of the Santa Cruz mountains and Coastal terrace are more susceptible to landslides, especially when the ground is saturated during storm events. When saturated soils occur near roadways, culverts, and bridge structures, landslides often occur to form road slip-outs. These slip-outs have resulted in exposed bridge abutments, crumbling roadsides, and ineffective culverts within the program area (Attachment J, pages 1 - 3). The applicant has identified several locations where slip-outs are expected to occur along the banks of watercourses/creeks and shoreline. These slipouts require maintenance repairs in the form of stabilization. Road and culvert infrastructure along Mills, Clear, Tunitas, Alpine, and Gazos creeks have been especially susceptible to landslides (Attachment J, pages 4 - 5). Unstable coastal cliffs and bluff locations along the coastline are also susceptible to erosion and geologic instability.

The DEIR evaluated the proposed RMP activities and their potential to result in significant impacts to soil resources. These include activities that would involve landslides, coastal bluff/cliff instability or erosion, substantial soil erosion or loss of topsoil. The RMP is intended to reduce erosion-related impacts associated with construction and maintenance activities through careful planning combined with proper selection and implementation of erosion control measures. The maintenance activities will reduce or minimize water velocities on county-maintained stream banks, ditches, slopes and other large disturbed areas by implementing BMPs that dissipate its erosive forces and protect water quality. Maintenance will reduce sedimentation through implementation of BMPs which preserve topsoil. Such BMPs will allow for the enhancement of water quality and in-stream habitat by reducing sedimentation.

Proposed maintenance activities will also include repairs to County infrastructure damaged by erosion, including bridges, culverts and roads. These actions could include stabilizing slopes at County park facilities on the Coastside such as: Devil's Slide Trail, Fitzgerald Marine Reserve, Pillar Point Bluff, and Mirada Surf West. Maintenance activities that may occur in the vicinity of coastal bluffs or cliffs within County parks include trail and road maintenance, weed or non-native plant removal, other vegetation maintenance activities such as brush removal or mowing, and other minor facility repairs.

The proposed RMP would result in beneficial effects as County facilities and infrastructure will be repaired, replaced, and maintained. For example, the County will repair degraded culverts, bridge abutments, failed slopes/banks along creeks and oceanside, and road slip-outs to improve safety and protect water quality. Best Management Practices will be implemented to minimize temporary impacts as well as to ensure worker safety during construction activities. The proposed program is not anticipated to substantially increase instability or erosion of coastal cliffs and bluffs because the program will focus on repairing existing roads and trails and maintaining vegetation adjacent to these facilities.

The RMP incorporates many BMPs which address soil erosion, sedimentation, and prevent soil contamination, for example BMP GEN-2 is to minimize the area of disturbance and site maintenance, BMP GEN-3 which establishes construction site entrances and perimeter controls, and BMP EC-13 ensures slope and bank stabilization. (See **Attachments G and H**) The proposed RMP with the BMPs is therefore consistent with the General Plan for the protection of soil resources.

c. Visual Quality

Policies 4.1 (Protection of Visual Quality), 4.3 (Protection of Vegetation), and 4.4 (Protection of Appearance of Rural and Urban Development), provide for the protection of visual resources. These policies among others protect scenic resources and the natural, visual quality of San Mateo County, as well as promote aesthetically pleasing development in rural areas. Policy 4.15 (Appearance of New Development) regulates development to promote and enhance good design, site relationships and other aesthetic considerations. Policy 4.17 (Protections for Coastal Features) provides that the County, particularly County Parks, regulate coastal development to protect and enhance natural landscape features and visual quality through measures that ensure the basic integrity of sand dunes, cliffs, bluffs and wetlands. Policy 4.22 (Scenic Corridors), aims to protect and enhance the visual quality of scenic corridors by managing the location and appearance of structural development. Policy 4.26 (Earthwork Operations) requires that grading or earth-moving operations be kept to a minimum; and that where grading is necessary, ensure that graded areas blend with the natural landform. Policy 4.27 (Water Bodies) allows for the development of approved dams and impoundments and stream clearance operations.

Structures that would adversely affect the appearance of a stream and the associated riparian habitat are discouraged under Policy 4.27, as well as the alteration of streams and other natural drainage systems which would affect their appearance, reduce underground water recharge, or cause drainage, erosion or flooding problems. Policy 4.29 (Trees and Vegetation) provides for the preservation of trees and natural vegetation (except where required for development that is approved) and requires replacement of trees and vegetation with native plant materials where possible. Policy 4.29 affords large native trees special protection. Policy 4.41 (Coordination of Scenic Roadway) Standards and Design) requires coordinating standards for roadway and right-of-way design, improvements, and maintenance with cities in order to maintain a consistent approach in applying scenic conservation standards. Policy 4.44 (Road Design and Construction) requires the design and construction of new roads and road improvements to be sensitive to the visual qualities and character of the scenic corridor. The County is also encouraged by Policy 4.44 to construct and maintain scenic turnouts, conduct selective clearing of vegetation to open new vistas, and develop picnic and rest areas at selected locations along the scenic road system. Policy 4.58 (Tree and Vegetation Removal) allows for the removal of trees and natural vegetation when done in accordance with existing regulations. Policy 4.61 (Roads and Driveways) requires design and construction of new roads, road improvements, and driveways to be sensitive to the visual qualities and character of the scenic corridor. The number of access roads connecting to a scenic road is to be limited to the greatest extent possible; and where possible the number of driveways is also limited so that entries onto scenic roads are reduced.

The RMP includes the reuse of native materials (soils and large woody debris) at routine maintenance sites to the extent possible; and the removal of invasive plant species at County parks and other County maintained areas. The DEIR describes developed and undeveloped areas within San Mateo County ranging from Bayside developed/urban areas such as the cities of South San Francisco, San Bruno, Millbrae, Burlingame, and Hillsborough to undeveloped areas (west of Interstate 280) including San Andreas Lake and Lower Crystal Springs Reservoir and surrounding forested watershed lands owned by the City and County of San Francisco. Land uses to the east of Interstate 280 are predominantly urban. The eastern portion of Bayside in the north is characterized by Bay frontage and shoreline. Parklands include San Bruno Mountain State and County Park and the County's Coyote Point Recreation Area, Junipero Serra County Park, and Crystal Springs Trail. The visual character of the park areas can be generally described as a combination of urban development to the east and mountainous forested watershed lands to the east of San

Andreas Lake and Upper and Lower Crystal Springs reservoirs. Bayside topography in the southeast is generally flat and highly developed within the cities of San Mateo, Redwood City, Belmont, San Carlos, and Menlo Park. The San Francisco Bay shoreline supports an elaborate system of sloughs, estuarine marshes, and salt ponds. Rolling foothills that extend up to the Santa Cruz Mountains can be observed west of U.S. Highway 101 and Interstate 280 with residential and mixed urban development. West of Interstate 280 remains primarily undeveloped and includes the Upper Crystal Springs Reservoir and forested watershed lands. County Parks' facilities in this region include Edgewood County Park and Natural Reserve, Huddart County Park, Wunderlich County Park, Friendship Park, Flood County Park, Alpine Trail, and Crystal Springs Regional Trail. This area's visual character is defined by a combination of undeveloped watershed lands, urban development, highways, and sloughs and estuarine habitat along the Bay shoreline. Bayside in the southern portion of the County in unincorporated areas is characterized by industrial and urban development with residential land uses particularly as seen in North Fair Oaks (adjacent to Redwood City, Atherton, and Menlo Park, for example. Coastside topography is steep with watershed headlands dropping guickly to the coast.

The main urbanized areas of Coastside are the City of Pacifica and unincorporated communities of Broadmoor (near Daly City), Montara, Moss Beach, and El Granada. County Park facilities in this region include Devil's Slide Trail, Sanchez Adobe County Park, San Pedro Valley County Park, Moss Beach, James V. Fitzgerald Marine Reserve, Pillar Point Bluff, Mirada Surf West, Mirada Surf East, and Quarry County Park and the Wicklow property. Coastside's northern area is predominantly undeveloped and characterized by the steep coastal topography, and rocky beaches. Central Coastside topography is defined by the Santa Cruz Mountains with steep mountain slopes that transition into gradually sloped coastal terraces near Half Moon Bay. The County has open space preserve areas, including Purisima Creek Redwoods, El Corte de Madera Creek, and Tunitas Creek Open Space Preserve. Sam McDonald County Park trails provide vistas of the Butano and Skyline Ridges as well as views of the Pacific Ocean. Coastside in the south consists of undeveloped, open space lands including the State of California Pescadero Marsh Natural Preserve. There is very little urban development throughout this region. The more gradually sloped coastal areas support farming and ranching activities. There are designated State Scenic Highways and Corridors and County Scenic Corridors located within San Mateo County. Highway 1 (from Santa Cruz County to Half Moon Bay), Interstate 280 (Santa Clara County line to the San Bruno city limit),

and State Route 35 (from Santa Cruz County line to State 92) are officially designated state scenic highways. The DEIR identifies additional areas that are eligible for State Scenic Highways.

The majority of DPW's maintenance sites are located along countymaintained roads and associated facilities including, as mentioned above, roadway shoulders, roadside ditches, culverts, bridges, green infrastructure-based stormwater facilities, and flood control facilities primarily in undeveloped and rural coastal areas. Slope failures occur along Gazos Creek and Gazos Creek Road, which is situated in a rural and undeveloped area. The DEIR analysis indicates that the aesthetic appearance of these bank repair sites is considered moderately high as motorists can view creeks and open space areas. Maintenance activities that occur along designated scenic roads or highways have high visual quality as these roads offer views of natural resources in largely undeveloped areas.

The DEIR also indicates that maintenance sites located in residential areas tend to have moderate visual quality because storm water facilities are located in residential/developed areas. The Department of Public Works maintenance sites are located in more urbanized areas, particularly Bayside, and adjacent to urban development. County Parks and regional trails including Devil's Slide Trail, Alpine Trail, and Crystal Springs Regional Trail, are viewed by recreationists such as hikers, bicyclists, joggers, and horseback riders. County Parks facilities provide the public with many opportunities to view and experience nature and open space from trails and scenic viewpoints. Coyote Point Recreation Area includes trails and paths that provide, unobstructed views of San Francisco Bay. Sam McDonald Park provides scenic viewing opportunities of redwoods as well as longranging views of the Pacific Ocean from ridgeway trails. The DEIR states that County parks are generally considered to have a high visual quality rating because these recreational facilities typically provide scenic views of natural features and landscapes.

The visual analysis conducted for the DEIR is based on evaluations of aerial and ground-based photographs of the anticipated routine maintenance sites. Maintenance activities including vegetation maintenance (e.g., mowing, tree pruning and removal), culvert repair and replacement, bank stabilization, bridge maintenance, and sediment removal from a creek channel, may be visible from scenic viewpoints, residential neighborhoods, and public roads during the construction phase. Mowing, tree removal and pruning, could affect the visual character of public trails or roads; however, these activities are conducted in specific areas for the purposes of maintaining fire breaks, trails that are highly used by recreationists, and site distances for motorists along County roads. Bank stabilization projects would result in some sections of visibly altered banks with new materials; however, since the Program is limited to seven repairs per year, adverse effects on scenic vistas, roads, and water bodies will be minimal. Moreover, the repair of a severely eroded road embankment can reasonably be considered an aesthetic improvement as compared to a damaged/threatened road or creek embankment. Repaired or replaced culverts would be similar in nature to existing culverts visible along County roads. Bridge maintenance activities would generally improve the visual conditions of such facilities as these projects primarily involve surface and deck treatments, repairing railings, clearing debris and other minor activities within the footprint of the existing bridge.

Tree removal is not expected to substantially damage views from Highways 1, Interstate 280, or State Route 92. Maintenance activities that may be partially visible from these scenic highways include vegetation maintenance, culvert repair, unpaved road or trail maintenance, and other minor facility repairs. Some tree removal work may occur at the above-referenced parks or trails; however, this activity would be limited to removing hazard trees (dead, decaying or fallen trees) that present a fire hazard and/or are public safety hazard within proximity to Parks Department facilities such as trails, picnic areas, campgrounds and parking lots. The proposed RMP activities would not have a substantial impact on visual resources.

The DEIR analyzes the RMP's impact on scenic vistas, views from residential areas, public lands, water bodies, or roads. The DEIR evaluates the proposed RMP's project activities potential to negatively affect scenic resources (including, to trees, rock outcroppings, and historic buildings) viewed from a State Scenic Highway are evaluated in the Draft Environmental Impact Report. The DEIR analysis also addresses whether maintenance activities will substantially degrade the existing visual character of a project site and its surroundings particularly in non-urbanized areas. Bank stabilization, slip-out/slide repairs, bridge maintenance, culvert repair or replacement, sediment and debris removal, and other channel and storm drainage maintenance, and vegetation management activities would not substantially change the visual character of DPW or Parks Department sites and surroundings.

Vegetation management activities would not be any different than those currently conducted by the County. Maintaining vegetation along County roads, trails, and around other park facilities could have a beneficial effect on visual resources by minimizing obstruction of views. A maintenance activity could have a temporary impact on the visual quality and scenic resources at a site due to the presence of construction materials, equipment and vehicles. Construction activities, however would be temporary (likely to last no more than a few weeks). Implementation of the below-listed BMPs would reduce temporary adverse effects on the visual character of maintenance sites. Visual conditions could be improved or enhanced as a result of proposed maintenance activities. Bank stabilization projects utilizing biotechnical treatments, for example, would improve visual conditions by establishing vegetation along creek banks. The removal of debris would improve the cleanliness and appearance of a site.

The proposed RMP incorporates BMP AES-1 through AES-5 to protect the County's visual quality and scenic resources at the various project sites, therefore it is consistent with the General Plan Policies as discussed above, for the protection of the visual quality of County Park areas, Scenic Highways, and coastal shoreline areas.

d. <u>Historical and Archaeological Resources</u>

Policy 5.20 (*Site Survey*) and Policy 5.21 (*Site Treatment*) encourage the protection and preservation of archaeological sites, require a determination to be made on whether or not sites for new development contain archaeological/paleontological resources, and prior to approval of development for these sites, require mitigation measures be incorporated into the project for handling resources in the event that these resources are discovered.

The DEIR discusses the correlation between different types of habitat and where/how populations settled in the different areas of San Mateo County. Large populations of people established residential communities along tidal marshland, grassland prairie, and oak woodland. Riparian corridors, small creeks and springs within these community areas supported people's subsistence.

Proposed RMP activities, particularly those that involve ground disturbance, have the potential to result in impacts to known and unknown cultural resources. Activities include culvert replacement, bridge maintenance, sediment removal, creek bank stabilization, and road and trail slip-out and slide repairs. The DEIR indicates that no locations with human remains are currently known to exist on lands under the County's jurisdiction; however, burials may be identified during the course of pre-maintenance surveys or discovered as the result of ground-disturbing activities. The RMP incorporates BMP CUL-1 through CUL-6, which together will reduce the potential for disturbance of human remains (see **Attachment I**). The proposed RMP with the BMPs to protect cultural resources at the various project sites is therefore consistent with the General Plan Policies as provided and discussed above to encourage and preserve archaeological resources.

e. <u>Park and Recreation Resources</u>

Objective and goals for park and recreation resources are as provided in Policies 6.1 (Equitable and Balanced System of Facilities) and 6.2 (Meet Recreational Need) of the General Plan. Policy 6.1 encourages the provision of a balanced and equitable system of park and recreation facilities throughout the County. Further, Policy 6.11 encourages recreation providers such as County Parks to consider identified and/or changing needs and the impact upon environmental, service, competing land use, fiscal and organizational constraints. Policy 6.2 specifies that County residents' park and recreation needs be met in a manner that enhances the physical, mental, and spiritual quality of life of San Mateo County. Policy 6.4 (Environmental Compatibility) calls for the protection and enhancement of environmental quality when developing park and recreation facilities. The County must mitigate environmental impacts (including adverse effects on adjacent, privately-owned areas) that result from the development of park and recreational facilities. Policy 6.5 (Access to Park and Recreation Facilities) requires that appropriate access and conveniences be provided for all members of the pubic who use these park and recreation facilities. Policy 6.5 also requires the County to encourage the public to access to the park and recreation system using transportation other than private automobiles, where feasible. Policy 6.11 (Coastal Recreation and Access) requires County Parks to regulate: (1) coastal development to delineate appropriate locations and development standards for recreation and visitor serving facilities; and (2) development to increase public access to the shoreline and along the coast where access will be provided and how the access will be developed and maintained. The County must also develop programs to increase and enhance public access to and along the shoreline, consistent with Policy 6.11. Policy 6.18 (Regulation of Encroachment) requires the County to regulate encroachment by nonpark uses into park and recreation facilities and to minimize adverse impacts. When encroachment is deemed necessary and appropriate, consider the use the Creative Road Design Guide (San Mateo County Planning Division, 1978) to minimize environmental effects when improving roadways or building new ones in or through park and recreation resources. The County must also discourage the use of park and recreation facilities as access routes for private users; and

where such access is deemed necessary, develop these routes in accordance with standards established by the Parks and Recreation Division. County Parks must restore or implement other mitigation measures for damaged parklands, consistent with policy 6.18. Policy 6.29 (*Protection, Operation and Maintenance*) requires park and recreation facility providers to make provisions to protect, operate and maintain park and recreation systems and related easements. Policy 6.30 (*Minimize Traffic and Litter Problems*) provides for coordinated efforts with SamTrans and Caltrans to increase recreational transit through the Park and Ride Program service or increased weekend service for recreationists to reduce traffic and parking problems. Policy 6.30 encourages recreationists to properly dispose of litter in park and recreation facilities; and the adequate maintenance and improvement of roads and highways needed to serve recreation facilities.

San Mateo County, through County Parks, provides a variety of recreational opportunities for the public, featuring hiking trails for dayuse hiking, guided nature walks, and interpretive programs. The County's diverse natural communities provide the public with varied experiences along the coastal shoreline, in the surrounding flatlands around San Francisco Bay, mountainous areas, such as San Bruno Mountain, and multiple types of habitat. Park facilities include restrooms, drinking water facilities, bicycle stations, and campgrounds. The program area includes several County parks and regional trails. The proposed RMP will involve maintenance of existing facilities within the parks, and county-maintained roads, and creeks/channels. The marina at Coyote Point, and regional trails, including Crystal Springs Regional Trail, Devil's Slide Trail, and Alpine Trail are all included in the maintenance area.

There are a number of trails, picnic areas, campground areas, and other recreational facilities throughout the County's parks and regional trails. The majority of DPW's maintenance activities occur along county-maintained roads, some of these roads may be used by recreationists such as bicyclists, depending on their location. Recreational users of trails, roads, and other recreational facilities could experience temporary disruption during active maintenance activities. Maintenance activities that take place within parks, portions of trails, picnic areas, campgrounds or parking areas may have to be temporarily closed for the duration of the maintenance activity. Temporary facility closures may last from less than a day to up to several weeks to maximize public safety while they are used as access corridors or staging areas for vehicles, supplies, and equipment. Vegetation management, such as mowing, grazing and trimming, may also require temporary closure of trails in the vicinity of work areas. Trail and road maintenance activities such as tread repair or re-paving may require a few days to a couple weeks. Culvert replacement activities along trails may require up to three weeks. Temporary closures could affect recreational use but would be localized to a specific maintenance site. Alternative recreational opportunities throughout County parks and other parks in incorporated areas of San Mateo County would continue to be available. Implementation of the BMP GEN-18 for Traffic Control and Public Safety reduces the potential of the RMP to have a significant impact on recreation. The public would also be notified about any construction activities scheduled/planned to occur within County parks. Once proposed activities are completed, conditions of the Parks Department's trails, roads, bridges, and other amenities would improve.

A main objective of the RMP is to ensure that facilities are operational and safe for the public as appropriate. Repair of trails and roads ensures and encourages the public to access and use County recreational areas (e.g. parks, preserves, and open space). The proposed RMP with the mitigation measures to protect the County's recreation facilities at the various project sites is therefore consistent with the General Plan policies as discussed above.

f. <u>General Land Use</u>

Policy 7.3 (*Infrastructure*) requires that land uses be distributed where public services and facilities exist or can be feasibly provided (e.g., sewer and water systems) in order to achieve maximum efficiency. Policy 7.4 (Natural Resources) calls for designation of land uses in order to enhance the protection and management of natural resources. Policy 7.6 (Natural and Man-Made Hazards) requires the County to designate land uses in a manner to minimize the danger of natural and man-made hazards to life and property. Policy 7.16 (Land Use Objectives for Urban Areas) designates land use in urban unincorporated areas in order to: (1) maximize the efficiency of public facilities, services and utilities, (2) minimize energy consumption, (3) encourage the orderly formation and development of local government agencies, (4) protect and enhance the natural environment, (5) revitalize existing developed areas, and (6) discourage urban sprawl. General urban land use designations throughout the County include Residential, Commercial, Office, Industrial, Airport, Institutional, Recreation, and General Open Space. Policy 7.18 (Land Use Objectives for Rural Areas) designates land use in rural areas in order to: (1) preserve natural resources, (2) provide for the managed productive use and monitoring of resources, (3) provide outdoor

recreation, and (4) protect public health and safety. General rural land use designations include Agriculture, Low Density Residential, General Open Space, Timber Production, and Solid Waste Disposal.

The DEIR indicates that the RMP area comprises many different land uses, including agricultural, residential, open space, and public recreation. The Department of Public Works and County Parks have always conducted routine maintenance within the County right-of-way and within County parklands, on an on-going basis. The County, through the RMP, will continue to conduct routine maintenance as individual projects on its existing culverts, channels, bridges, flood control facilities, roads and trails, marina facilities, and vegetation near these facilities. Vegetation fuel management in the form of selective tree thinning, removal of undergrowth and secondary tree growth would also be conducted along County Park boundaries.

The RMP Manual is comprehensive as it describes the activities involved for maintaining the facilities/infrastructure as well as descriptions of required BMPs incorporated to ensure the protection of natural resources (that occur Bayside and Coastside). Activities include sediment removal; culvert, bridge and other storm drainage maintenance; roadside ditch and swale maintenance; vegetation management; trail and road repair; creek bank stabilization; and marina maintenance activities. Proposed maintenance activities along roadways and trails could result in temporary disruptions, such as traffic delays, trail access disruptions, or public safety hazards, to surrounding land uses. The DEIR analysis states that these disruptions could be considered incompatible with existing land uses, however the incompatibility will be short-term. Operation of heavy equipment could also contribute to noise and air emissions which affect nearby uses. Maintenance work is done in short duration (i.e., no longer than a few weeks) and the land use and project site would be returned to normal conditions.

The proposed RMP will not interfere with the above-described policies associated with the designation of land uses. These land use designation policies, among other things, ensure the distribution of land uses to achieve maximum efficiency of public services, minimize the danger of natural and human-created hazards to life and property. Objectives of the County's RMP are to maintain infrastructure to allow for the continuance of public services and facilities, and to minimize the potential danger of natural and human-caused hazards to life and property. Adherence to RMP BMPs will ensure that temporary impacts associated with maintenance activities are less-than-significant. The proposed RMP would not result in any long-term changes or effects to surrounding existing land uses or inconsistencies with existing land use designations or zoning regulations. Maintenance activities would occur at existing County or County Parks facilities and would not expand and/or create new structures but rather maintain/repair existing structures and County-owned land. The DEIR found that the proposed RMP will support the County's land use goals and policies for its incorporated jurisdictions by providing adequate capacities of channels and stormwater facilities; reducing the risk of roadway flooding and ensuring the structural integrity of bridges and roads, which thereby protects surrounding land uses; enhancing existing County and Parks facilities; and improving public safety by reducing road and fire risk hazards within the program area.

The majority of the program area is within unincorporated San Mateo County, though some parks, regional trails and DPW sites are located in incorporated areas. The conclusion of the DEIR analysis with respect to land use is that the proposed RMP will not result in longterm changes or impacts on existing land uses or be inconsistent with existing land use designations or zoning regulations. Maintenance activities would occur at existing park facilities and would not expand and/or create new structures but rather maintain/repair existing structures and County-owned land. The proposed RMP with the mitigation measures and BMPs is consistent with the General Plan policies with respect to general land use, as some maintenance activities, such as bank stabilization and erosion control work, vegetation management, as well as the overall program for County Parks enhance the protection and management of natural resources while providing recreational opportunities for the public.

g. Urban Land Use

Policy 8.27 (*Recreational Land Use Planning*) provides for the planning of recreational land uses to provide recreational opportunities for the public. Policy 8.32 (*Overcoming Constraints to Development*) encourages: (1) efficient and effective infrastructure (e.g., water supply, wastewater, roads) necessary to serve the level of development allowable within urban areas; and (2) improvements which minimize the dangers of natural and man-made hazards to human safety and property.

The proposed RMP will ensure that County facilities are properly functioning and operational. The proposed RMP as discussed above will ensure that optimal recreational opportunities are available to the public. The County's maintenance activities will keep infrastructure and facilities in good condition such that roads, bridges, and culverts, for example, work properly in urban areas. The proposed RMP, as discussed above, with the BMPs is consistent with the General Plan policies 8.27 and 8.32 as related to urban land use.

h. Rural Land Use

Policy 9.4 (Land Use Objectives for the Rural Lands) provides the following objectives: to protect and enhance rural lands resources, to conserve and protect vegetation, water, fish and wildlife resources, enhance the unique scenic quality and pastoral character of the rural lands; and to provide a variety of outdoor recreational opportunities for existing and future County residents. Policy 9.4 requires the protection of public health and safety by minimizing the location of new development in potentially hazardous areas and directing infrastructure improvements to areas that will benefit the greatest number of rural residents and visitors. An additional objective of Policy 9.4 is to minimize the extent of environmental damage caused by construction of major and minor roads or other infrastructure improvements. Policy 9.15 (Overcoming Constraints to Development) requires that the County support infrastructure improvements necessary to serve the level of development allowed within Rural Service Centers in order to mitigate any existing flooding hazards. Policy 9.23 (Land Use Compatibility in Rural Lands) encourages compatibility of land uses in order to promote the health, safety, and economy and to maintain the scenic and harmonious nature of the rural lands. Policy 9.35 (Encourage Existing and Potential Public Recreation Land Uses) encourages the continuation and expansion of existing public recreation land uses on non-agricultural lands, including but not limited to, public beaches, parks, recreation areas, wild areas, and trails. Policy 9.36 (Development Standards to Minimize Land Use Conflicts in Public Recreation Lands) provides that structural, visual, auditory and other buffering mechanisms, protect portions of the public recreation lands that are used by the public from non-recreational land uses.

The majority of DPW maintenance activities, as described above, occur in the County's right of way, along and within County roads. Parks Department activities occur within County parks and along public hiking and nature/interpretive trails. Maintenance activities include sediment removal; culvert, bridge and other storm drainage maintenance; roadside ditch and swale maintenance; vegetation management; trail and road repair; creek bank stabilization; and marina maintenance activities. The RMP maintains recreational facilities, as discussed above, and with the BMPs/mitigation measures reduces hazardous conditions and hazards such as flooding. The proposed RMP will not introduce new maintenance activities throughout the County, it will provide a uniform programmatic approach to maintaining County facilities and infrastructure while ensuring that environmental resources are protected. The program will not expand and/or construct new facilities that would increase development intensity in undeveloped or developed areas of the County. Therefore, the proposed RMP will not encourage off-site development of presently undeveloped areas or increase development intensity of already developed areas. The proposed RMP, as discussed above, with the BMPs is consistent with the General Plan policies as related to rural land use policies.

i. Transportation

Policy 12.6 provides the County's goal to plan for a transportation system that provides for the safe, efficient, and convenient movement of people and goods in and through San Mateo County. Policy 12.7 allows for the County to create and maintain complete streets that serve all categories of transportation users and goods, providing safe, efficient, comfortable, and convenient travel along all streets through an integrated, balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the General Plan. Policy 12.15 and Policy 12.16 provide for road improvements respectively in rural and urban areas, where improvements are needed due to safety concerns or congestion, support the construction of interchange and intersection improvements, additional traffic lanes, turning lanes, redesign of parking, channelization, traffic control signals, or other improvements while enhancing the functionality of travel routes for all transportation users.

The Department of Public Works is responsible for maintaining County paved and unpaved road surfaces. Parks Department maintains over 100 miles of unpaved roads throughout the County. Primary road maintenance activities include repairing potholes, repairing roadway base, repaving, gravel replenishment, extending pavement edges, paving graveled shoulders, sealing cracks, chip and slurry seal, resurfacing, and adding pavement marking and traffic control features. These activities are conducted to ensure a safe roadway surface for motorists and to prevent further roadway deterioration or failure. The Department of Public Works also conducts street sweeping to remove soil, organic material, dust and debris from County roads. The County responsibilities are to maintain shoulders within the County's right of way to provide a smooth transition from the edge of pavement to the shoulder surface where sufficient widths exist. The Department of Public Works maintenance repair activities in unincorporated areas will prevent further roadway deterioration and provide a safe roadway for public travel. The RMP will keep infrastructure in good condition such that roads and bridges, for example, provide safe, efficient, and convenient movement of people and goods through the County.

By comprehensively evaluating impacts up-front, the RMP will allow the County to continue with its routine maintenance on a streamlined basis, without requiring separate permits for individual projects. This will facilitate shortened response times for individual repair projects. The proposed RMP with the mitigation measures and program BMPs, as discussed above, is consistent with the General Plan policies with respect to transportation.

j. Natural Hazards

Policy 15.1 (*Minimizing Risks from Natural Hazards*) provides the County objective to minimize the potential risks of natural hazards, including but not limited to, loss of life, injury, and damage to property. Policy 15.4 (Definition of Natural Hazards) defines natural hazards as conditions of potential danger or risk to life and/or property resulting from acts of nature, man-made alterations to the natural environment that create hazardous conditions. and/or hazardous conditions intrinsic to the natural environment. Natural hazards may include risks or vulnerabilities likely to be caused or exacerbated by climate change. Policy 15.13 (Abatement of Natural Hazards) requires the County to take inventory and, where feasible, abate, repair, or rehabilitate natural hazard conditions which most directly threaten public health, safety, and property. It is the County's priority to address hazards that directly threaten critical facilities, life, and property. Policy 15.34 (Vegetative Clearance Around Structures) requires clearance of flammable vegetation around structures as a condition of approval to new development in accordance with the requirements of the agency responsible for fire protection. Periodic inspections to ensure maintenance of required clearances must be conducted, consistent with Policy 15.34. Policy 15.40 (Support Efforts to Inventory and Abate Structures that are Fire Hazard Risks) requires the County to support efforts to inventory and abate structures that do not meet existing fire codes and/or are vulnerable to damage from disastrous fire events. It is also the County's responsibility to encourage the repair, rehabilitation, or adaptive reuse of structures requiring abatement, rather than demolition. Policy 15.45 (Abatement of Flooding Hazards) requires support measures for the abatement of flooding hazards, including but not limited to debris clearance and silt removal programs conducted in a manner so as not to disrupt existing riparian communities.

The DEIR analysis evaluates the RMPs potential impacts with respect to fault rupture, seismic ground-shaking, liquefaction, coastal cliff/bluff instability, erosion, and landslides. Landslides are more likely to occur under saturated soil conditions and can result in property damage, injury, and loss of life. A good portion of the RMP area is located in a region designated as highly susceptible to landslides. The DEIR found that the RMP would have a beneficial effect by reducing people and structure's exposure to potential substantial adverse effects from landslides. Degraded roadside culverts, bridge abutments, failed embankments, and road slip-outs, proposed maintenance activities will reduce the degree of seismic and liquefaction-induced effects that would occur at these County sites relative to existing conditions. Flood conditions created by non-functioning culverts and compromised creek/stream banks, etc. will be avoided through implementation of the RMP along with the required Best Management Practices. The slopes and soil that supports bridge abutments and culverts, for example, will also be stabilized and better equipped to handle seismic activity in comparison to existing conditions. The proposed RMP with the program BMPs, as discussed above, is consistent with the General Plan policies with respect to natural hazards.

k. Man-made Hazards

General Plan policies on man-made hazards provides objectives for noise, hazardous materials, and hazardous structures. Policy 16.1 (Strive Toward a Livable Noise Environment) requires the County to strive toward an environment free from unnecessary, annoying, and injurious noise. Policy 16.2 (Reduce Noise Impacts Through Noise/Land Use Compatibility and Noise Mitigation) requires the County to reduce noise impacts within San Mateo County through measures which promote noise/land use compatibility and noise mitigation. Policy 16.3 (Promote Protection of Noise Sensitive Land Uses and Noise Reduction in Quiet Areas and Noise Impact Areas) promote measures that: (1) protect noise-sensitive land uses, (2) preserve and protect existing quiet areas, especially those which contain noise sensitive land uses, and (3) promote noise compatibility in Noise Impact Areas. Policy 16.4 (Noise Reduction Priority) requires that priority be given to reducing noise at the source rather than at the receiver. Policy 16.5 (Noise Reduction Along the Path and at the Receiver) promotes noise reduction along the path and at the receiver through techniques which can be incorporated into the design and construction of new and existing development including, but not limited to, noise barriers and construction techniques. Policy 16.6 (Definition of Noise) defines noise as sound that is annoying, harmful or unwanted. Policy 16.7 (Definition of Noise Sensitive Land Uses)

defines noise sensitive land uses including residential and institutional uses such as hospitals, schools and libraries, which are most sensitive to noise intrusion. Policy 16.8 (*Definition of Quiet Areas*) defines quiet areas as areas with perceived low ambient noise levels. Policy 16.9 (*Definition of Noise Impact Areas*) provides that areas experiencing noise levels of 60 CNEL or greater meet the definition of Noise Impact Area.

Policy 16.47 (Strive to Protect Life, Property, and the Environment from Hazardous Material Exposure) requires the County to strive to protect public health and safety, environmental quality, and property from the adverse effects of hazardous materials through adequate and responsible management practices. The County must also strive to ensure that hazardous waste generated within the County is stored, treated, transported and disposed of in a legal and environmentally safe manner so as to prevent human health hazard and/or ecological disruption, as required by Policy 16.48 (Strive to Ensure Responsible Hazardous Waste Management). Policy 16.49 (Strive to Reduce Public Exposure to Hazardous Materials) requires the County to strive to reduce the public's exposure to hazardous materials through programs to promote safe transportation, prevent accidental discharge, and to promote effective incident response, utilizing extensive inventory and monitoring techniques. Policy 16.50 (Reduce Public Exposure to Hazardous Waste) is a policy that also requires the County to strive to reduce public exposure to hazardous waste specifically by decreasing the generation of hazardous waste, promoting an increased disposal capability for small generators of hazardous waste, including households and small businesses, promoting safe transportation of hazardous waste, treatment and processing techniques as alternatives to landfill disposal of hazardous waste, and preventing illegal disposal of hazardous waste. Policv 16.51 (Definition of Hazardous Material) defines hazardous material as a substance which, because of quantity, concentration, physical or chemical characteristics, is capable of injuring life and/or the environment. Examples include toxic chemicals and metals, pesticides and explosives. Policy 16.52 (Hazardous Waste) defines hazardous waste as a hazardous material requiring disposal. The County must strive toward safe building construction and full elimination of hazardous conditions as required by Policy 16.68 (Strive Toward Safe Building Construction).

The proposed RMP will involve the use of heavy equipment which could generate noise during construction activities. The routine transport use and disposal of hazardous materials, such as pesticides, herbicides, fuel, oil, solvents, and related materials are also part of DPW's routine maintenance. County maintenance workers transport herbicides to a project site for vegetation management and, upon completing the project, must properly dispose of used herbicide containers or applicator equipment. The Department of Public Works will use heavy construction equipment for road and bridge repair projects, sediment removal, and bank stabilization require fuel, oil, lubricants, and other potentially hazardous materials. It is also possible that proposed program activities could encounter contaminated soil or water, which would require transport and disposal.

The DEIR determined that the transport, use, and disposal of hazardous materials could potentially create a hazard to the public or the environment. There are existing laws to protect the public and the environment from hazardous materials, regulations such as the Hazardous Waste Control Act require the County to track and dispose of its hazardous waste at approved facilities. Compliance with these laws and regulations would greatly reduce the potential for the proposed RMP to create a significant hazard to the public or the environment. The RMP incorporates the implementation of BMPs to minimize the potential for the improper storage, handling, use, transport, and disposal of hazardous materials. Impacts associated with the majority of hazardous materials transport, use, and disposal that will occur under the proposed RMP would be less-than-significant. Contact with contaminated soil, sediment, or groundwater during some project activities could be potentially significant. Implementation of Mitigation Measure HAZ-1 would reduce this impact to less-thansignificant with the implementation of mitigation measures. Routine Maintenance Program BMPs include GEN-6 (Hazardous Materials Storage/Disposal), BMP GEN-7 (Spill Prevention and Control), BMP GEN-9 (Vehicle Maintenance and Parking), and BMP GEN-10 (Equipment Maintenance and Fueling).

The proposed RMP with the mitigation measures and program BMPs, as discussed above, is consistent with the General Plan policies with respect to man-made hazards.

2. <u>Conformance with the Local Coastal Program (LCP)</u>

Staff has reviewed the proposed project and found it to comply with all applicable Local Coastal Program (LCP) Policies, specifically:

a. Locating and Planning New Development Component

Policy 1.1 (*Coastal Development Permit*) states that after certification of the LCP, a Coastal Development Permit (CDP) is required for all development in the Coastal Zone subject to certain exemptions.

Policy 1.2 (Definition of Development) defines development as to include, on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes. Policy 1.2 further provides that a "structure" includes, but is not limited to, any buildings, road, and pipe. Policy 1.25 (Protection of Archaeological/Paleontological Resources) requires a project proponent to, based on the County's Archaeology/Paleontology Sensitivity Maps, determine whether or not sites proposed for new development are located within areas containing potential archaeological/paleontological resources. A mitigation plan, adequate to protect the resource and prepared by a gualified archaeologist/paleontologist be submitted for review and approval and implemented as part of the project, is a requirement under Policy 1.25.

The proposed RMP could potentially result in impacts to archaeological resources if inadvertently encountered during grounddisturbing activities. Refer to the General Plan discussion above regarding archaeological resources. Implementation of the RMP's BMPs will reduce potential disturbance of human remains. An area of potential effects (APE) will be established for individual projects conducted under the program that require a field investigation. The APE will encompass the project's area of direct impact and a 50-foot buffer, as well as all construction staging areas, and access improvements. The proposed RMP includes BMP CUL-1 through BMP CUL-6 to mitigate potential impacts to historical and archaeological resources. The proposed RMP with BMPs to protect cultural resources at the various project sites is therefore consistent with Policy 1.25.

b. Public Works Component

Policy 2.1 (*Development Review of Public Works*) requires any public utility, government agency, or special district considering the undertaking of development within the Coastal Zone obtain a Coastal Development Permit. Policy 2.2 (*Definition of Public Works*) defines public works as: (a) all production, storage, transmission and recovery facilities for water, sewage, telephone, and other similar utilities owned or operated by any public agency or by any utility subject to the jurisdiction of the Public Utilities Commission except for energy facilities; (b) all public transportation facilities, inducing streets, roads, highways, public parking lots and structures, ports, harbors, airports, railroads and mass transit facilities and stations, bridges, trolley wires and other related facilities; and (c) all publicly financed recreational facilities and any development by a special district. Policy 2.4 (*Ordinance Conformity*) requires special districts, public utilities, and other governmental agencies to be in conformity with the County's Zoning Regulations and the LCP policies. Policy 2.5 (*Improvements for Bicycle and Pedestrian Trails*) provides that the County ensure that no roadway repair or maintenance project blocks or damages any existing or formally planned public trail segment or, if such an impact is not avoidable, that an equal or better trail connection is provided in conjunction with the repair and maintenance project.

The RMP is for the continued routine repair of public works as defined by Policy 2.1. The County's facilities include some trails for bicycles and pedestrians in the vicinity of roadways within park areas. Trails may temporarily be blocked for safety during project activities, however an alternative trail/access will be provided to the public where feasible. The RMP includes measures to ensure that project activities will not block or damage public trails consistent with the LCP policies of the Public Works Component.

c. Sensitive Habitats Component

Policy 7.1 (*Definitions*) provides that all perennial and intermittent streams and their tributaries are defined as sensitive habitat. Policy 7.3 (*Protection of Sensitive Habitats*) prohibits any land use or development which would have significant adverse impacts on sensitive habitat areas. This policy also regulates development in areas adjacent to sensitive habitats and requires development to be sited and designed as to prevent impacts that could significantly degrade the sensitive habitats.

The proposed project includes comprehensive BMPs including specific measures to ensure the protection of biological resources. The DEIR prepared for the proposed project identifies twenty-two land uses/habitat types within the program area, which are generally categorized as aquatic/wetland, riparian, grasslands, cropland, urban, beaches/dunes, coastlines, forest/woodland, scrub/shrubland, and barren. The County will implement the proposed RMP throughout the County covering two zones identified for the program, Bayside (east of the mountain ridges and bordering San Francisco Bay) and Coastside (west of the mountain ridges and bordering the Pacific Ocean). Policy 7.5 (*Permit Conditions*) requires permit applicants demonstrate that the proposed development will not result in significant impacts on sensitive habitat. Applicants are required to provide a report prepared

by a qualified professional if significant impacts might occur. The report must provide: (1) mitigation measures to protect resources and comply with the LCP policies of the Shoreline Access, Recreation/Visitor-Serving Facilities and Sensitive Habitats Components, and (2) a program for monitoring and evaluating the effectiveness of mitigation measures. Policy 7.5 requires the restoration of damaged habitat as a condition of permit approval when it is the Planning Director's judgement that restoration is feasible. Policy 7.7 (Definition of Riparian Corridors) defines riparian corridors by the limit of riparian vegetation. The corridor must contain at least 50 percent cover of some combination of the species specified/listed in Policy 7.7. Policy 7.8 (Designation of Riparian Corridors) establishes riparian corridors for all perennial and intermittent streams and lakes and other bodies of freshwater in the Coastal Zone. Designate those corridors shown on the Sensitive Habitats Map and any other riparian area meeting the definition of Policy 7.7 as sensitive habitats requiring protection, except for man-made irrigation ponds over 2,500 sq. ft. surface area. Policy 7.9 (Permitted Uses in Riparian Corridors) provides permitted uses in riparian corridors, which include trails and scenic overlooks on public land. Policy 7.10 (Performance Standards in Riparian Corridors) and Policy 7.13 (Performance Standards in Buffer Zones) respectively require permitted development in corridors, among other things, to minimize removal of vegetation, minimize erosion sedimentation, and run-off by appropriate grading and re-planting modified areas, maintain natural vegetation buffer areas that protect riparian habitat; limit the sound emitted from motorized machinery to be kept to less than 45-dBA at any riparian buffer zone boundary except for farm machinery and motorboats, and prevent the discharge of toxic substances, such as fertilizers and pesticides. Policy 7.14 (Definition Wetland) defines wetland as an area where the water table is at, near, or above the land surface long enough to bring about the formation of hydric soils or to support the growth of plants which normally are found to grow in water or wet ground. The range of wetland types that occur in San Mateo County and the criteria that qualifies as a wetland are provided under Policy 7.14. An area must contain at least 50 percent cover of some combination of typical wetland plants including cordgrass, pickleweed, jaumea, frankenia, and marsh mint to gualify as a wetland. Policy 7.16 (Permitted Uses in Wetlands) provides the uses allowed in wetlands, which include incidental public service purposes that include burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines. Diking, dredging, and filling only as it serves to maintain existing dikes and an open channel at Pescadero Marsh, where such activity is necessary for the protection of preexisting dwellings from flooding, or where such activity will enhance or restore the biological productivity of the marsh. Policy 7.17

(*Performance Standards in Wetlands*) requires that the development permitted in wetlands minimize adverse impacts during and after construction. No herbicides can be used in wetlands, all construction must take place during daylight hours, and motorized machinery must be kept to less than 45-dBA at the wetland boundary are specified by Policy 7.17. Refer to the General Plan discussion above with respect to the RMPs potential impact on biological resources (vegetative, water, fish and wildlife resources). Policy 7.18 (*Establishment of Buffer Zones*) requires a buffer of a minimum 100 feet landward from the outermost line of wetland vegetation.

The DEIR identifies significant but mitigable impacts to biological resources and cumulative biological effects. The BMPs specifically for the protection of biological resources are provided in Table 2-5 of the DEIR, which lists comprehensive BMPs to ensure that impacts to biological resources from project activities are avoided or minimized (**Attachment F**).

The proposed RMP with mitigation measures identified in the DEIR will result in less-than-significant impacts to biological resources. Refer to the General Plan discussion regarding vegetative, water, fish and wildlife resources. The RMP with BMPs and required mitigation measures is in conformity with LCP policies identified above for the protection of sensitive habitat areas.

d. Visual Resources Component

Policy 8.2 (Beaches) provides for the protection of beaches as it prohibits permanent structures on open sandy beaches except facilities required for public health and safety (i.e., beach erosion control structures). Policy 8.4 (Cliffs and Bluffs) prohibits development on bluff faces and cliffs except public access, such as stairways and erosion control structures that are in conformity with coastal access and erosion policies. Bluff top development and landscaping is required to be setback from the bluff edge to ensure that the visual quality of the area is not obstructed when viewed from the shoreline except in highly developed areas where adjoining development is nearer the bluff edge, or in special cases where a public facility is required to serve the public's safety, health, and welfare. Policy 8.6 (Streams, Wetlands, and Estuaries) addresses the visual character of areas within the Coastal zone; it requires that development be set back from the edges of streams, wetlands, estuaries, and other waterways in order to preserve the scenic value of these coastal resources. Policy 8.6 ensures the protection of visual quality of perennial streams and associated riparian habitat are protected from the adverse effects of structural development. Wetlands must be kept

intact, and the open, natural visual appearance of estuaries and their surrounding beaches be retained, as required by Policy 8.6. The Sensitive Habitats Component of the LCP has policies that permit public accessways in wetlands as long as the proposed design "respects" the visual and ecological fragility of an area and its adjacent land be permitted. Policy 8.7 (Development on Skylines and Ridgelines) prohibits development on skylines and ridgelines. Development must not jut out above a skyline or ridgeline. Policy 8.9 (Trees) requires that new development minimize tree removal and requires compliance with the County's Significant Tree and Heritage Tree Ordinances for the protection of significant trees within areas zoned Design Review and unique trees. Policy 8.9 requires the protection of trees specifically selected for their visual prominence and their important scenic qualities. The removal of trees in scenic corridors is prohibited except by selective harvesting whereby the existing visual resource is protected from negative impacts or by other cutting methods necessary for approved development that complies LCP policies and opens important views from public vista points, roadways, and trails. Policy 8.9 prohibits the removal of living trees with a trunk circumference of more than 55 inches measured 4 1/2 feet above the average surface of the ground, except as may be permitted for development under the regulations of the LCP or permitted under the Timber Harvesting Ordinance. Trees that pose a threat to public health, safety, or property are allowed to be removed under Policy 8.9. Policy 8.10 (Vegetative Cover (with the exception of crops grown for commercial purposes)) Replace vegetation removed during construction with plant materials (trees, shrubs, ground cover) which are compatible with surrounding vegetation and is suitable to the climate, soil, and ecological characteristics of the area. Policy 8.25 (*Definition*) defines special features as unique structural, land, or vegetative forms that possess or exhibit distinctive qualities that set them apart from all others, contribute significantly to the scenic resources of the Coastal Zone, and are listed in the Inventory of Special Features in the LCP. Policy 8.27 (Natural Features) prohibits the destruction or significant alteration of special natural features through implementation of the LCP's landform and vegetative policies. The RMP is comprehensive and includes mitigation measures and BMPs to prevent the destruction of the County's natural features. The Department of Public Works and County Parks are responsible for maintaining County parks, many of which have unique features.

The DEIR analyzes the RMP's impact on scenic vistas, views from residential areas, public lands, water bodies, or roads. The RMP's project activities potential to result in damage to scenic resources viewed from a scenic highway including, to trees, rock outcroppings, and historic buildings within a State Scenic Highway are evaluated in the Draft Environmental Impact Report. The DEIR analysis also addresses whether or not activities will substantially degrade the existing visual character of a project site and its surroundings in nonurbanized areas. Bank stabilization, slip-out/slide repairs, bridge maintenance, culvert repair or replacement, sediment and debris removal, and other channel and storm drainage maintenance, and vegetation management activities would not substantially change the visual character of DPW or Parks Department sites and surroundings. See the General Plan discussion above with respect to visual resources. The proposed project will not result in impacts to visual resources in the Coastal Zone, therefore it is in conformity with the LCP policies for the protection of visual resources.

e. <u>Hazards</u>

Policy 9.1 (Definition of Hazard Areas) defines Policy 9.2 (Designation of Hazard Areas) provides the definition of hazardous areas which includes land subject to dangers from unstable slopes, landslides, coastal cliff instability, flooding, and steep slopes (over 30 percent). Policy 9.7 (Definition of Coastal Bluff or Cliff) defines coastal bluff or cliff as a scarp or steep face of rock, decomposed rock, sediment or soil resulting from erosion, faulting, folding or excavation of the land mass and exceeding 10 feet in height. Policy 9.8 (Regulation of Development on Coastal Bluff Tops) permits bluff and cliff top development only if design and setback provisions are adequate to assure stability and structural integrity for the expected economic life span of the development (at least 50 years) and if the development (including storm runoff, foot traffic, grading, irrigation, and septic tanks) will neither create nor contribute significantly to erosion problems or geologic instability of the site or surrounding area. Policy 9.9 (Regulation of Development in Floodplains) states that development located within flood hazard areas shall employ the standards. limitations and controls contained in Chapter 35.5 of the San Mateo County Ordinance Code, Sections 8131, 8132, and 8133 of Chapter 2 and Section 8309 of Chapter 4, Division VII (Building Regulations), and applicable Subdivision Regulations. Policy 9.11 (Shoreline Development) provides that new development be located (with the exception of coastal-dependent uses or public recreation facilities) in areas where beach erosion hazards are minimal and where no additional shoreline protection is needed. Policy 9.12 (Limiting Protective Shoreline Structures) and Policy 9.13 (Shoreline Structure Design) respectively permit shoreline structures when, among other things, necessary to serve coastal-dependent uses, to protect existing development, or to protect public beaches in danger of erosion; and to protect existing roadway facilities that provide access to beaches and recreational facilities when alternative routes are not feasible and the

design of structures comply with the LCP's Hazards component and other LCP policies, as applicable.

A purpose of the proposed RMP is to facilitate the County's ability to conduct routine maintenance and repairs of its facilities, including hazardous locations due to erosion, road slip-outs, landslides, slope/bank instability along creeks, etc. The RMP projects will not involve altering the designed flood conveyance capacity of an engineered channel or large capital improvements. Development proposed under the RMP will repair and alleviate hazardous conditions. Consistent with the LCP, the routine work will be conducted in a manner so as to not create unstable geologic conditions. Work to maintain and repair culverts, storm drains, and to inspect floodwalls and levees will ensure that the integrity of these structures, thus avoiding the potential for flooding in areas.

f. <u>Shoreline Access</u>

Policy 10.2 (Definition of Development) in addition to the definition provided above regarding Policy 1.2, development includes any structure which would close off, restrict, or impede access to an existing access trail. Regarding the provision of shoreline access, exempt from the requirement for provision of shoreline access, any repair or maintenance activity for which the Coastal Commission has determined, pursuant to Section 30610, that a CDP will be required unless the County or the Commission determines that such activity will have an adverse impact on lateral public access along the beach. Policy 10.9 (*Public Safety*) discourages public use of access trails which are hazardous because safety improvements have not been provided or cannot be built due to physical limitations. Specifically, (1) close undeveloped trails which are hazardous when an alternative safe existing or potential access is available for the same beach or bluff; and (2) when no safe access alternative is available, close undeveloped hazardous trails identified in Tables 10.1 and 10.2 as having a "high" rating in the public safety hazards category and which pose a risk of serious bodily harm because of the height or unstable nature of bluffs or the limited beach area between the mean high tide line and the base of the bluff. Give priority to the acquisition and improvement of nearby access or for the improvement and re-opening of accesses closed for safety reasons to those trails which lead to long sandy beaches as indicated on Table 10.1. Policy 10.19 (Maintenance) provides for maintaining public areas, at a minimum eliminate debris, provide trash cans and keep trails safe for public use in new or improved public areas. Policy 10.23 (Access Trails) requires that trail improvements be designed and to blend with the natural environment. The disturbance or alteration of landforms which would

cause or contribute to erosion or geologic hazards is prohibited by Policy 10.23. Policy 10.37 (*Fitzgerald Marine Reserve*) provides for the continued improvement, expansion, and maintenance of the Fitzgerald Marine Reserve.

The proposed RMP will continue the County's ability to maintain its facilities and infrastructure county-wide, as well as those located within the many County Parks (including trails and picnic areas). The routine maintenance activities will reduce and or eliminate unsafe conditions on trails, roadways, and scenic highways. The public will continue to have safe access to recreational facilities throughout the County, particularly those within Coastside areas. The RMP does not cover projects that require a separate CDP issued by the Coastal Commission for areas in the Coastal Zone. Shoreline accessibility will be encouraged and retained through implementation of the Routine Maintenance Program. The RMP which includes BMPs to avoid significant impacts to public access is consistent with LCP policies for the protection of shoreline access.

g. <u>Recreation/Visitor-serving Component</u>

The LCP provides for recreational and visitor-serving facilities and uses in the Coastal Zone. Policy 11.3 (Definition of Public Recreation Facilities) provides the definition of public recreation facilities as lands and facilities serving primarily a recreation function which are operated by public agencies. Such facilities include parks, recreation areas, wild areas, and trails. Policy 11.4 (Recreation and Visitor-Serving Facilities Permitted in the Coastal Zone) allows for the permitting of recreation facilities designed to enhance coastal recreation opportunities for the public and that do not substantially alter the natural environment. Policy 11.18 (Sensitive Habitats) with respect to development standards for recreation and visitor-serving facilities requires that studies be conducted by a qualified person agreed to by both the County and the applicant during the planning and design phases of facilities located within or near sensitive habitats and archaeological/paleontological resources to determine the least disruptive locations for improvements and the methods of construction. These studies should consider the appropriate intensity of use, improvements and management to protect the resources and reduce or mitigate impacts. Policy 11.24 (Priorities for the Expenditure of Public Funds) has established priorities for the expenditure of public funds on public recreation and visitor-serving facilities, based on the level of existing development and need that include necessary visitorserving facilities such as rest areas, public restrooms, drinking water, and campgrounds, within existing public recreation areas be maintained. Policy 11.27 (Improvement, Expansion, and Maintenance

of Public Recreation) states the role of the County as that being to continue the improvement, expansion, and maintenance of the Fitzgerald Marine Reserve, San Pedro Valley Park, and the California Coastal Trail.

The RMP is the County's comprehensive program to continue routine maintenance of infrastructure and facilities. The DEIR identifies 22 parks/trails within the Parks' system all of which require maintenance of roads (paved and unpaved), culverts, hazard trees/ fuel management, and vegetation management. The RMP comprises maintenance activities for valued park and recreation facilities which provide for diverse recreational opportunities throughout the County, including the Coastside. Maintaining the parks, roads, trails, culverts will enhance coastal recreation opportunities for the public. The BMPs ensure that the natural environment will not be substantially altered. See the General Plan discussion above regarding recreation. The proposed RMP is consistent with the LCP policies for recreation and visitor-serving facilities.

h. Public Access

Section 30210 (Access; Recreational Opportunities; Posting) of the Coastal Act states that in carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse. Section 30211 (Development not to Interfere with Access) requires that development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation. Section 30221 (Oceanfront Land; Protection for Recreational Use and Development) provides that oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

The County's proposed RMP will ensure that recreational facilities, particularly at County Parks located in the Coastal Zone, are safe and available for public access, consistent with Section 30210. Maintenance activities will remove dangerous site conditions, such as eroded public trails on bluff tops, which may interfere with the public's ability to access to the sea/coast. The RMP with BMPs, including traffic control measures implemented during repair projects, will avoid and or reduce the potential for interference with access to the sea/the coast, consistent with Section 30211.

B. <u>ALTERNATIVES</u>

The DEIR considered alternatives, pursuant to CEQA, that would be feasible and would avoid or substantially reduce one or more significant impacts of the proposed program. The alternatives are: (1) No Project, (2) Reduced Maintenance, (3) No Herbicide Use Alternative and (4) No Tier 3 Maintenance Activities. The proposed RMP is the preferred alternative as it will meet all of the County's objectives without resulting in any significant and unavoidable impacts. Please refer to Chapter 5 of the DEIR for the complete alternatives analysis.

C. ENVIRONMENTAL REVIEW

The County prepared and circulated a Draft Environmental Impact Report (DEIR) for 45-day public review period, pursuant to the California Quality Act (CEQA). The County prepared responses to comments received and on August 24, 2020 distributed the Final Environmental Impact Report (FEIR) to all those individuals and reviewing agencies that commented on the DEIR. The FEIR is to be certified by the Planning Commission at its public hearing on September 9, 2020.

D. <u>REVIEWING AGENCIES</u>

California Coastal Commission California Department of Fish and Wildlife California Department of Transportation Regional Water Quality Control Board U. S. Fish and Wildlife Service Midcoast Community Council San Mateo County Environmental Health Services San Mateo County Building Division, Geotechnical Unit

ATTACHMENTS

- A. Recommended Findings and Conditions of Approval
- B. Mitigation Monitoring and Reporting Program (MMRP)
- C. Statement of Findings of Significant Impacts and Rejection of Alternatives
- D. Program Area Map
- E. Summary Maintenance Program
- F. Summary Potential Impacts and Mitigation
- G. Program BMPs
- H. BMPs Biological Resources
- I. BMPs Cultural Resources
- J. Photos
- K. Link to DPW webpage for RMP Manual and Final EIR: <u>https://publicworks.smcgov.org/projects/county-san-mateo-routine-maintenance-program</u>

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County of San Mateo Planning and Building Department

RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN 2020-00119

Hearing Date: September 9, 2020

Prepared By: Renée Ananda Project Planner For Adoption By: Planning Commission

RECOMMENDED FINDINGS

1. <u>Regarding the Environmental Review</u>:

To Certify the Final Environmental Impact Report (EIR), Find:

- a. That Final (EIR is complete, correct and adequate and prepared in accordance with the California Environmental Quality Act (CEQA) and applicable State and County guidelines. A Notice of Preparation was prepared and distributed to the public and responsible agencies, the Draft EIR circulated for public review and comments, and the Final EIR distributed to all those individuals and individuals that commented on the Draft Environmental Impact Report.
- b. That the Final EIR was presented to the Planning Commission, and the Planning Commission reviewed and considered the information contained in the Final EIR prior to approving the project. The Final EIR was presented to the Planning Commission at the September 9, 2020 hearing, at which time the Planning Commission reviewed and considered the information contained in the Final EIR and supporting documentation. The Planning Commission has determined that the Final EIR contains complete and accurate reporting of the environmental impacts and mitigation measures associated with the Routine Maintenance Program.
- c. That the Final EIR reflects the independent analysis and judgment of the County. The County has exercised independent judgement in accordance with Public Resources Code Section 21082.1(c)(3) in retaining its own environmental consultant, directing the consultant in preparation of the Final EIR, as well as reviewing, analyzing, and revising material prepared by the consultant.

Regarding Significant Impacts Find:

That the Planning Commission has considered the CEQA "Statement of Findings of Significant Impacts and Rejection of Alternatives" document included as Attachment C of this staff report and on the basis of the substantial evidence set forth therein, finds that the Routine Maintenance Program will not result in significant impacts because changes or alterations have been required in, or incorporated into, the program which avoid or substantially lessen the significant environmental effects as identified in the Final Environmental Impact Report.

Regarding Project Alternatives, Find:

That the Planning Commission has considered the CEQA "Findings Supporting Rejection of Alternatives" included in Attachment C of this staff report and on the basis of the substantial evidence set forth therein, finds that specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly-trained workers, make infeasible the alternatives identified in the Environmental Impact Report.

Regarding the Mitigation Monitoring and Reporting Program Find:

That the mitigation measures identified in the Final EIR, placed as conditions on the project, and identified as part of this public hearing, have been incorporated into the Mitigation Monitoring and Reporting Plan in conformance with California Public Resources Code Section 21081.6. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effects identified in the Final Environmental Impact Report.

Regarding the Coastal Development Permit, Find:

- 2. That the project, as described in the application and accompanying materials required by Section 6328.7 and as conditioned in accordance with Section 6328.14, conforms with the plans, policies, requirements and standards of the San Mateo County Local Coastal Program (LCP). The proposed project is consistent with all applicable LCP policies as contained in the Locating and Planning New Development, Public Works, Sensitive Habitats, Visual Resources, Hazards, Recreation/Visitor-serving Facilities, and Public Access, components of the Local Coastal Program.
- 3. Where the project is located between the nearest public road and the sea, or the shoreline of Pescadero Marsh, that the project is in conformity with the public access and public recreation policies of Chapter 3 of the Coastal Act of 1976 (commencing with Section 30200 of the Public Resources Code).and Chapter 3 of the Coastal Act of 1976. The County's Routine Maintenance Program will ensure that recreational facilities, particularly at County Parks located in the Coastal

Zone, are safe and available for public access, consistent with the Local Coastal Program.

4. The Planning Commission has reviewed the plans and materials and determined the Routine Maintenance Program (project), as proposed and conditioned, will not result in adverse impacts on Coastal Resources, and complies with the policies for Locating and Planning New Development, Public Works, and for the protection of Sensitive Habitats, Visual Resources, Shoreline Access, Recreation/Visitorserving Resources, and Hazards. The Routine Maintenance Program incorporates comprehensive Mitigation Measures and Best Management Practices for the protection of natural resources.

RECOMMENDED CONDITIONS OF APPROVAL

Current Planning Section

- 1. This approval applies only to the proposal as described in this report and materials submitted for review and approval by the Planning Commission on September 9, 2020. The Community Development Director may approve minor revisions or modifications to the project if they are found to be consistent with the intent of and in substantial conformance with this approval.
- 2. Biological Resources Implement the following mitigation measures identified in the DEIR for the protection of:
 - a. <u>Special-Status Plant or Animal Species</u>:
 - (1) Mitigation Measure BIO-1: Provide Compensatory Mitigation for Special Status Plant Species. San Mateo County will provide compensatory mitigation for unavoidable impacts on special-status plant populations, where impacts on a special-status species' population is unavoidable and above the specified threshold (i.e., 5 percent for state or federally-listed species, 10 percent for California Rare Plant Ranks (CRPR) List 1B and 2 species, and 20 percent for CRPR List 3 or 4 species - see impact discussions BIO-1B and BIO-1C in the Draft Environmental Impact Report). Compensation for unavoidable impacts on populations of specialstatus species plants will be provided by a combination of preservation and enhancement of those species' populations outside of program work sites. For impacts on populations (including partial populations) of a specific special-status species, compensatory mitigation will include preservation, enhancement, and management of lands that (a) already support equal or greater numbers (and health) of individuals of that species and (b) contain sufficient unoccupied habitat to allow for an increase in populations, the increase being at least equivalent to the number impacted, through habitat enhancement and

management. For determining the number of individuals impacted, the highest number of individuals known to be present within the impact area within the prior ten years (if the impact area has undergone multiple surveys in recent years) will be used to determine the magnitude of the impact to the entire population of the species.

For populations to be preserved, the County will develop a Habitat Mitigation and Management Plan (HMMP), describing the measures that will be taken to enhance and manage the mitigation lands and to monitor the effects of management on special-status plant species. The HMMP will include, at a minimum, the following:

- a summary of impacts on special-status plant populations;
- a description of the location and boundaries of the mitigation site and description of existing conditions;
- a description of the funding mechanism to ensure the longterm maintenance and monitoring of the mitigation lands;
- a description of measures to be undertaken, if necessary, to enhance (e.g., through focused management) the mitigation site for the focal special-status plant species;
- a description of measures to transplant individual plants or seeds from the impact area to the mitigation site, if determined by a qualified botanist to be appropriate and to have a high likelihood of success;
- proposed management activities, such as managed grazing and management of invasive plants, to maintain high-quality habitat conditions for the focal special-status plant species.
- a description of species monitoring measures on the mitigation site including specific, objective goals and objectives, performance indicators, success criteria, monitoring methods, data analysis, reporting requirements, and monitoring schedule. Determining specific performance/success criteria requires information regarding the specific mitigation site, its conditions, the biological resources present on the site, the specific plant species for which mitigation is being provided, and the specific enhancement and management measures tailored to the mitigation site and its conditions. The mitigation will be tied to number of individuals or area of occupied habitat that is directly impacted, and final success criteria will include a

timeframe in which the population will be expected to be recovered (e.g., after five years, the mitigation population will support at least as many individuals s were impacted). In addition, the success criteria will be tied to a nearby reference population to control for regional and temporal variation that will take into account events such as drought and climate fluctuations. Specific criteria will be defined in the Habitat Mitigation and Management Plan. The HMMP performance/success criteria will guide mitigation to manage and protect high-quality habitat for, and populations of, the impacted species; and

• a description of the management plan's adaptive component, including potential contingency measures for mitigation elements that do not meet performance criteria.

After mitigation has been provided for impacts on special-status plant populations in a specific area from a specific year's activities, future (i.e., repetitive) impacts on that area will not require additional mitigation.

If compensatory mitigation is provided for federally-listed plant species, the HMMP will be provided to the USFWS for review. It is possible that this mitigation measure may be refined during the Section 7 Consultation with USFWS (e.g., in the Biological Opinion covering Program effects on federally-listed plant species), in which case the refinements required by USFWS will be implemented. If compensatory mitigation is provided for state-listed plant species, the HMMP will be provided to CDFW for review. It is possible that this mitigation measure may be refined during the consultation process with CDFW, in which case the refinements required by the CDFW will be implemented.

(2) Mitigation Measure BIO-2: Establish Tree Protection Zones for Ground-disturbing Activities Near Butano Ridge Cypress. If ground-disturbing activities are proposed and unavoidable within 50 feet of an individual Butano Ridge cypress to be avoided, a tree protection zone (TPZ) will be established to protect those populations. In order to minimize the impacts on Butano Ridge cypress at a maintenance work area, the County will implement the following tree protection measure: Butano Ridge cypress trees that are within 50 feet of proposed program activities will be clearly marked for avoidance. Fenced enclosures for individual trees or groups of trees to be protected will be erected at the driplines of trees, where possible, or as established by the County biologist or another qualified biologist. Soil disturbance within this protection zone will not be permitted.

- (3) Mitigation Measure BIO-3: Monitor Temporary Impact from Vegetation Management Activities on "Disturbance-Tolerant" Special-Status Plant Species. If vegetation management activities that could provide a long-term benefit to special-status plant species (e.g., grazing for thatch removal, invasive plant species removal, shrub and tree removal for fuel reduction, etc.) are proposed and impacts on special-status plant species are unavoidable and greater than a certain threshold (i.e., 10% for CRPR List 1 and 2 species and 20% for CRPR List 3 and 4 species [see Impact BIO-1C below]), the following measures will be implemented.
 - If the vegetation management activity is likely to result in any amount of ground disturbance, then prior to implementation of the maintenance activity, the County shall salvage plant material prior to disturbance. This could include removing and retaining the topsoil prior to the implementation of maintenance activities to salvage the seed bank and/or propagules, such as bulbs, corms, etc.
 - Success criteria will be developed to evaluate the progress of the population following the maintenance activity. As with the development of the Habitat Mitigation and Management Plan (HMMP) described under Mitigation Measure BIO-1 the specific performance/success criteria for this monitoring will depend on information regarding the specific site, its conditions, the biological resources present on the site, and the specific plant species. The success criteria will be tied to number of individuals or area of occupied habitat that is directly impacted, and final success criteria will clearly state a timeframe in which the population will be expected to be recovered (e.g. after five years, the population will still support at least as many individuals as were impacted). In addition, the success criteria will be tied to a nearby reference population to control for regional and temporal variation that would take into account events such as drought and climate fluctuations.
 - The population must show evidence that it is recovering in the initial year following the maintenance activity. This requirement will be modified accordingly if the reference population is also in decline indicating that regionally the species is in decline for a reason other than the maintenance activity (e.g., drought).
 - If plants are not observed to be recovering from the maintenance activity and the reference population is not in decline, then the County will work with a qualified botanist to develop a restoration plan for the impacted population, either using the salvaged plant material or plant material from the same watershed. The

restoration plan will generally follow the format of the HMMP described in Mitigation Measure BIO-1, describing the measures that will be taken to enhance and manage the mitigation population and to monitor the development of the population towards specific success criteria. The County will monitor the impacted population for three years. By year three, the population needs to show an increasing trend toward improvement. If the population is not showing improvement, then the County will provide compensatory mitigation for the loss of that portion of the population as described in Mitigation Measure BIO-1.

- Mitigation Measure BIO-4: Provide Compensatory Mitigation for (4) the California Red-Legged Frog and California Tiger Salamander. The County shall compensate for the long-term loss of habitat for the California red-legged frog and/or California tiger salamander via the restoration, enhancement, and/or management of suitable habitat on County lands (either existing lands or lands that are acquired): financial contribution to local County based watershed, stewardship, or non-profit organizations that lead or coordinate habitat restoration or watershed improvement projects; or purchase of credits in a U.S. Fish and Wildlife Service (USFWS)-approved conservation bank. Compensatory mitigation for permanent loss of breeding habitat shall be provided at a ratio of up to 3:1 (mitigation: impact). Compensatory mitigation for long-term loss of upland dispersal or refugial habitat shall be provided at a ratio of up to 2:1 (mitigation: impact), on an acreage basis. The required mitigation ratio shall be negotiated annually with the USFWS and California Department of Fish and Wildlife (CDFW) for impacts on the California tiger salamander) based on the types and quality of habitat impacted during each year's maintenance activities. For any mitigation efforts, the County shall ensure adequate monitoring to document that the mitigation is operational and successfully providing the functions and value needed to offset potential program impacts. The County shall prepare an HMMP describing the measures that shall be taken to manage the property and to monitor the effects of management on the California red-legged frog and California tiger salamander; the HMMP shall include, at a minimum, the following:
 - A summary of impacts on red-legged frog and/or tiger salamander habitat and populations, and the proposed mitigation;
 - A description of the location and boundaries of the mitigation site and description of existing site conditions;

- A description of measures to be undertaken, if necessary, to enhance (e.g., through focused management) the mitigation site for red-legged frogs and/or tiger salamander;
- Proposed management activities, such as managed grazing, management of invasive plants, measures targeted at sustaining populations of burrowing mammals, or other measures to maintain high-quality habitat for red-legged frogs and/or tiger salamanders:
- A description of species monitoring measures on the mitigation site, including specific goals and objectives, performance indicators, success criteria, monitoring methods, data analysis, reporting requirements, and monitoring schedule. Determining specific performance/success criteria requires information regarding the specific mitigation site, its conditions, and the specific enhancement and management measures tailored to the mitigation site and its conditions.
- A description of the management plan's adaptive component, including potential contingency measures for mitigation elements that do not meet performance criteria; and
- A description of the funding mechanism for the long-term maintenance and monitoring of the mitigation lands.
- (5) Mitigation Measure BIO-5: Provide Compensatory Mitigation for the San Francisco Garter Snake. The County shall compensate for the long-term loss of habitat for the San Francisco garter snake via the restoration, enhancement, and/or management of suitable habitat on County lands (either existing lands or lands that are acquired); financial contribution to local County based watershed, stewardship, or non-profit organizations that lead or coordinate habitat restoration or watershed improvement projects; or purchase of credits in a USFWSapproved conservation bank. Compensatory mitigation for permanent loss of breeding habitat shall be provided at a ratio of up to 3:1 (mitigation: impact), and compensatory mitigation for long-term loss of upland dispersal or refugial habitat shall be provided at a ratio of up to 2:1 (mitigation: impact), on an acreage basis. The required mitigation ratio shall be negotiated annually with the USFWS and California CDFW, based on the types and quality of habitat impacted during each year's maintenance activities.

For any mitigation efforts, the County shall ensure adequate monitoring to document that the mitigation is operational and successfully providing the functions and valued needed to offset potential Maintenance Program impacts. The County shall develop an HMMP, which shall include components similar to those described for the California red-legged frog and California tiger salamander in Mitigation Measure BIO-4.

For County-led on-site and off-site mitigation projects, the County shall be responsible to monitor such projects for a period of 3 to 5 years depending upon the type of mitigation project. For watershed partnering mitigation projects in which the County serves as a partner funding the mitigation through an agency such as the San Mateo Resource Conservation District (RCD), it is anticipated that the local partner (RCD) shall monitor and provide reporting on the site for a period of 3 to 5 years. While it is the watershed partner's responsibility to monitor site conditions, it shall be the County's responsibility to communicate monitoring results annually as part of the County Maintenance Program's reporting process.

Mitigation Measure BIO-6: Burrowing Owl Pre-Activity Survey (6) and Avoidance. Prior to ground-disturbing program activities in highquality burrowing owl habitat (i.e., extensive grasslands with abundant ground squirrel burrows, and possibly other habitats such as ruderal habitat or open scrub if determined by a gualified biologist to provide suitable burrowing owl roosting habitat), a focused pre-activity survey shall be conducted for burrows occupied by migrant or overwintering burrowing owls. Surveys shall be conducted by a gualified biologist (i.e., one who is familiar with burrowing owl ecology and experienced in performing surveys for them) no more than 14 days prior to commencement of ground-disturbing activities. These surveys shall be conducted in accordance with the CDFW's 2012 Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012) or any more current equivalent should new guidelines be released before the activity is initiated. Although burrowing owls are not expected to breed in the program area, pre-activity surveys shall be conducted year-round due to the potential for dispersing juveniles or failed breeders from South Bay breeding populations (in addition to migrants and wintering birds present during the nonbreeding season). During the initial site visit, which shall be conducted no more than 14 days prior to the start of construction, a qualified biologist shall survey the activity area and (to the extent that access allows) habitat within 250 feet of the site for burrowing owls and suitable burrowing owl habitat (i.e., ground squirrel burrows). If no burrows suitable for use by burrowing owls are present, no additional surveys shall be required. However, if suitable burrows are determined to be present, the gualified biologist shall visit the site one additional time to investigate each burrow for signs of owl use and to determine whether owls are present in areas where they could be affected by the proposed activities. This site visit shall take place no more than 24 hours prior

to the start of ground disturbing activities. If an occupied burrow(s) is found, impacts on the burrow shall be avoided by the implementation of a construction-free buffer around the occupied burrow. The size of the buffer shall be determined by the qualified biologist but shall be sufficient to ensure the occupied burrow is not damaged. No grounddisturbing program activities shall commence within the buffer area until a qualified biologist confirms that the burrow is no longer occupied. If impacts on occupied burrows are unavoidable, passive relocation techniques shall be used to evict owls from burrows within the work area prior to initiation of ground disturbing activities. No owls shall be evicted during the breeding season (February 1 through August 31) unless a biologist can determine that owls are not actively nesting.

(7) Mitigation Measure BIO-7: Provide Alternative Bat Roost Habitat. If a tree containing a pallid or Townsend's big-eared bat maternity roost, or a large non-maternity roost (i.e., ≥ 10 individuals), is to be removed by proposed program activities, a qualified bat biologist will design and determine an appropriate location for an alternative roost structure. If a tree containing a pallid or Townsend's big-eared bat maternity roost or large non-maternity roost is not removed, but program-related disturbance causes the abandonment of the roost site (even during the non-breeding season), then the County shall either monitor the roost site to determine whether the affected species returns to the roost or construct an alternative roost. If the County elects to monitor the roost and bats do not return within one year, an alternative roost shall be constructed.

A qualified bat biologist will determine the appropriate location for the alternative roost structure, based on the location of the original roost and habitat conditions in the vicinity, and oversee installation of a new roost structure. The roost structure either will be built to specifications determined by a qualified bat biologist or will be purchased from an appropriate vendor (though a qualified bat biologist should approve the type of structure purchased). The structure will be placed as close to the affected roost site as feasible. The County shall monitor the roost for up to three years (or until occupancy is determined, whichever occurs first) to determine use by bats. If, by year 3, pallid bats or Townsend's big-eared bats are not using the structure, a qualified bat biologist, in consultation with CDFW, will identify alternative roost designs or locations for placement of the roost, place the new roost at the agreed upon location, and monitor the new roost for an additional three years (or until occupancy has been verified).

- b. <u>Riparian Habitat or Other Sensitive Natural Communities</u>: As identified in local or regional plans, policies, regulations or by California Department of Fish and Wildlife, U. S. Fish and Wildlife Service, or National Marine Fisheries Service.
 - (1) Mitigation Measure BIO-8: Provide Compensatory Mitigation for Woody Riparian Vegetation. By April 30 of each year, the County shall notify the relevant regulatory agencies of the year's planned maintenance projects. The relevant regulatory agencies shall be provided with information describing proposed maintenance project activities, locations, natural resource conditions, and any other key resource issues. The notification package shall describe which ground-disturbing maintenance activities will result in impacts on temporary and permanent impacts on riparian habitat. Notification shall describe in detail the County's proposal for providing compensatory mitigation for those impacts and may include one or more options described in Chapter 2, Section 2.7.3 of the DEIR and summarized below:

For regular maintenance activities that have potential to remove some riparian habitat, the preferred mitigation approach is on-site mitigation. The general on-site mitigation approach is to restore the type of habitat that is impacted by maintenance activities in the same project vicinity or stream reach where the disturbance has occurred. The County will seek to implement biotechnical solutions, as conditions allow, to avoid or minimize the potential hardening of creek banks. For many program activities, this will occur as part of implementing one of the biotechnical Erosion Control BMPs (e.g., BMPs EC-1 through EC-14). For example, implementing EC-1: Brush Layering, EC-2: Brush Packing, EC-3: Live Staking, or EC-4: Live Pole Drain, would involve using willow stakes (and other woody native material that can re-sprout) as a biotechnical repair technique would result in the re-establishment of woody riparian habitat in-place following maintenance activities.

For on-site, in-kind mitigation, the County shall restore, preserve, and manage riparian habitats, or substantially improve the quality of highly degraded riparian habitats at a ratio of 1.5:1, meaning 1.5 acres of riparian habitat shall be restored/created for every 1 acre of riparian habitat impacted by proposed program activities.

For off-site, where on-site is not possible in-kind mitigation for riparian habitat, the County shall acquire, preserve, enhance, and manage lands that provide similar ecological functions and values to the riparian habitat impacted by program maintenance activities. The acquisition and reservation/enhancement of these higher quality lands will occur at a ratio of 3:1, meaning 3 acres of riparian shall be acquired, preserved, and enhanced for every 1 acre of riparian habitat impacted by proposed program activities. Enhancement may include modification of existing management, limited planting, or invasive plant removal, or other activities to enhance riparian/aquatic habitat functions and values.

Other options for compensatory mitigation include establishing conservation easements or deed restrictions, partnering with local San Mateo County based watershed, stewardship, or non-profit organizations that lead or coordinate habitat restoration or watershed improvement projects.

- c. <u>Wetlands</u>: Federally Protected Wetlands as defined by Section 404 of the Clean Water Act; Wetlands as defined by the California Coastal Act.
 - (1) Mitigation Measure BIO-9: Provide Compensatory Mitigation for Impacts on Wetlands and other Waters. By April 30 of each year, the County shall notify the relevant regulatory agencies of the year's planned maintenance projects. The relevant regulatory agencies shall be provided with information describing proposed maintenance project activities, locations, natural resource conditions, and any other key resource issues. The notification package shall describe which ground-disturbing maintenance activities will result in temporary and permanent impacts on wetlands or waters of the U.S. and state. Notification shall also describe in detail the County's proposal for providing compensatory mitigation for those impacts and may include one or more options described in Chapter 2, Section 2.7.3 of the DEIR and summarized below.

For routine maintenance activities located outside of tidal wetland/other waters habitat within the USACE jurisdiction, the preferred mitigation approach is on-site mitigation. The general onsite mitigation approach is to restore the type of habitat that is impacted by maintenance activities in the same project vicinity or stream reach where the disturbance has occurred. The County will seek to implement biotechnical solutions, as conditions allow, to avoid or minimize the potential hardening of creek banks.

For on-site, in-kind mitigation, the County shall restore, preserve, and manage wetlands and aquatic habitats, or substantially improve the quality of highly degraded wetlands and aquatic habitats at a ratio of 1.5:1, meaning 1.5 acres of wetlands or other waters shall be restored/created for every 1 acre of wetlands and other waters permanently impacted by program activities.

For off-site, in-kind mitigation, where on-site is not possible, the County will acquire, preserve, enhance, and manage lands that provide similar ecological functions and values to the wetlands and other waters impacted by Program maintenance activities. The acquisition and preservation/enhancement of these higher quality lands will occur at a ratio of 3:1, meaning 3 acres of wetlands or other waters shall be acquired, preserved, and enhanced for every 1 acre of wetlands and other waters impacted by Program activities. Enhancement may include modification of existing management, limited planting, or invasive plant removal, or other activities to enhance wetland/aquatic habitat functions and values.

Other options for compensatory mitigation include establishing conservation easements or deed restrictions, partnering with local San Mateo County based watershed, stewardship, or non-profit organizations that lead or coordinate habitat restoration or watershed improvement projects, or the purchase of mitigation credits from the San Francisco Bay Wetland Mitigation Bank. For the purchase of mitigation credits mitigation will occur at a ratio of 1:1.

- 3. Hazards Implement the following mitigation measures identified in the DEIR:
 - a. Mitigation Measure HAZ-1: Proper Handling and Disposal of Contaminated Soil, Sediment, and Groundwater. Prior to initiating ground-disturbing activities, the County or its contractors will inspect the soil, sediment, or groundwater for the presence of possible contamination. If indicators of contamination (e.g., foul odor, staining or sheen, etc.) are found, the County or its contractors will then test the soil. If the lab results confirm contamination is present, the soil, sediment, or groundwater will be treated as hazardous and dispose of the material at an approved hazardous waste disposal facility. In removing potentially contaminated soil, sediment, or groundwater, workers will wear protective clothing and equipment to limit their exposure.
 - b. Mitigation Measure HAZ-2: Review of Proximity to Existing Known Hazardous Materials Clean-up Sites and Implementation of Safety Precautions. The County and/or its contractors will evaluate the proximity of proposed maintenance sites that involve ground-disturbing activities to existing known hazardous material clean-up sites. This review will include examination of the planned maintenance activity footprint in relation to records of hazardous materials sites in the State Water Resources Control Board's GeoTracker database and the Department of Toxic Substances Control's EnviroStor database.

If the proposed maintenance activity is located on or within 100 feet of a documented hazardous material contamination site, for which clean-up

activities have not been completed or been successful, the County and/or its contractors will commission a Phase I Environmental Site Assessment to more fully characterize the past land uses and potential for soil and/or groundwater contamination to occur at or in close proximity to the site. If the Phase I Environmental Site Assessment demonstrates a reasonable likelihood that contamination remains within the proposed maintenance activity's area of disturbance, the County and/or its contractors will commission a Phase II Environmental Site Assessment, including soils testing, to characterize the extent of the contamination and develop ways to avoid the contaminated areas during maintenance activities. The County will follow all recommendations of the Phase II Environmental Site Assessment and conduct the proposed maintenance to avoid areas of contamination, to the extent feasible. In the event that it is not feasible to avoid all areas of contamination, the County and/or its contractors will follow all applicable laws regarding management of hazardous materials and wastes. This includes proper disposal of any contaminated soil in a hazardous waste landfill and ensuring that workers are provided with adequate personal protective equipment to prevent unsafe exposure.

- 4. Noise impacts Implement the following mitigation measures identified in the DEIR:
 - a. Mitigation Measure NOI-1: Employ Noise-Reducing Maintenance Practices. The following measures will be implemented by the County to reduce adverse effects from maintenance activity noise in locations where noise-sensitive receptors could be adversely affected:
 - (1) Locate stationary equipment as far as practical from noise-sensitive land uses;
 - (2) Use electrified or otherwise quieter equipment when practical;
 - (3) Use sound-control devices on equipment that are more effective than devices originally provided on the equipment;
 - Use noise-reducing enclosures around noise-generating equipment; and
 - (5) Install temporary barriers between noise sources and noise-sensitive land uses, or take advantage of existing barrier features (e.g., terrain and structures) to block sound transmission.
 - (6) When determining haul truck routes, consideration will be given to altering haul routes to avoid sensitive receptors when feasible.

- b. Mitigation Measure NOI-2: Advance Notification of Nearby Sensitive Receptors. The County will notify sensitive receptors located within 400 feet of maintenance sites at least one week prior to performing maintenance work.
- c. **Mitigation Measure NOI-3: Limit Nighttime Construction Noise** When feasible, the County will ensure that no construction activities are conducted in close proximity (500 feet) to a residence outside the hours of 8:00 a.m.–5:30 p.m. on weekdays (or the applicable specific hours permitted by the local jurisdiction if extended outside of this time period) unless a special exemption permit allowed by the local jurisdiction is obtained.
- d. **Mitigation Measure NOI-4: Implement Vibration Reduction Measures.** The County will implement the following vibration-reducing measures during construction activities which could generate substantial vibration to minimize impacts on nearby sensitive receptors:
 - (1) Ensure proper tuning of vibration-causing equipment.
 - (2) Use vibration damping devices to the extent feasible.
 - (3) Limit use of vibratory equipment to the extent feasible and do not overlap use of vibratory equipment. Where possible, maintain a distance of 20+ feet from buildings.
 - (4) Use electric stationary equipment (e.g., generators) where feasible.
 - (5) Implement noise and/or vibration shields, such as sound aprons or temporary enclosures with sound-absorbing material, on or around construction equipment. For all maintenance activities involving the use of construction equipment or hauling trucks occurring within 75 feet of residences at any time of day, install a temporary noise and vibration barrier between the project site and the nearest sensitive receptors. Following the completion of maintenance activities within that distance, the barrier will be removed.
- e. Mitigation Measure NOI-5: Employee Best Management Practices at Airports. The County will require that employees performing any maintenance activities within an airport are supplied with and wear personal protective equipment (i.e., noise reducing headphones or earplugs) to protect against excessive noise levels. Further, to the extent feasible, maintenance activities would be performed during periods of time when the frequency of plane landings/takeoffs is minimal.
- f. Mitigation Measure AQ-1: Locate Stockpiles of Odorous Materials and Pile Burning Activities at a Distance from Sensitive Receptors. The

County or its contractor(s) will be required to handle stockpiles of potentially odorous excavated or dredged material, or other potentially odorous materials, in a manner that avoids affecting residential areas or other sensitive receptors to the extent feasible. Stockpiles will be placed as far as possible from these receptors and will be covered if immediate off-site disposal is not feasible. Stockpiles for pile burning and pile burning activities will be located as far from sensitive receptors as possible.

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COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT



MITIGATION MONITORING AND REPORTING PLAN

This mitigation monitoring and reporting plan (MMRP) identifies the mitigation measures identified in the County of San Mateo's (County's) Routine Maintenance Program Environmental Impact Report (EIR). For each mitigation measure, **Table 1** identifies monitoring and reporting actions that will be carried out and the applicable schedule for monitoring activities. Table 1 also includes a column where responsible parties can check off monitoring and reporting actions as they are completed.

As Lead Agency, the County will be responsible for ensuring that mitigation measures identified in this EIR are fully implemented. Some mitigation measures will be implemented by the contractor(s) on behalf of the County. Contract documents for the proposed program will identify the obligations of the contractor, including relevant mitigation measures. The County will require that the contractor(s) provide them with documentation that the contractor has adequately implemented all contractual obligations, including applicable mitigation measures. Thus, although the County may be responsible for implementing a mitigation measure (i.e., where the measure states "County will"), this is intended to be inclusive of the contractor's role in implementing certain mitigation measures during maintenance or as part of design.

Acronyms and Abbreviations

BAAQMD	Bay Area Air Quality Management District
CDFW	California Department of Fish and Wildlife
County	County of San Mateo
CRPR	California Rare Plant Ranks
DEIR	draft environmental impact report
ESA	Environmental Site Assessment
HMMP	Habitat Mitigation and Management Plan
RCD	San Mateo Resource Conservation District
TPZ	tree protection zone
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

References Cited

California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation.

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Table 1. Mitigation Measures and Implementation Requirements

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
Aesthetics	·		
None required.			
Air Quality			-
Mitigation Measure AQ-1: Locate Stockpiles of Odorous Materials and Pile Burning Activities at a Distance from Sensitive Receptors The County or its contractor(s) will be required to handle stockpiles of potentially odorous excavated or dredged material, or other potentially odorous materials, in a manner that avoids affecting residential areas or other sensitive receptors to the extent feasible. Stockpiles will be placed as far as possible from these receptors and will be covered if immediate off-site disposal is not feasible. Stockpiles for pile burning and pile burning activities will be located as far from sensitive receptors as possible.	 Include stockpiling requirements in contract documents. Identify appropriate areas for stockpiles of odorous materials and pile burning. 	 Prior to maintenance During maintenance 	
Biological Resources		I	
Mitigation Measure BIO-1: Provide Compensatory Mitigation for Special-Status Plant Species San Mateo County will provide compensatory mitigation for unavoidable impacts on special-status plant populations, where impacts on a special-status species' population is unavoidable and above the specified threshold (i.e., 5% for state or federally-listed species, 10% for CRPR List 1B and 2 species, and 20% for CRPR List 3 or 4 species – see impact discussions BIO-1B and BIO-1C in [EIR]). Compensation for unavoidable impacts on populations of special-status plants will be provided by a combination of preservation and enhancement of those species' populations outside program work sites. For impacts on populations (including partial populations) of a specific special-status plant species, compensatory mitigation will include preservation, enhancement, and management of lands that (a) already	 Determine the number of individual special-status plants impacted and the magnitude of impact to the entire population of the species to determine whether the impact is above the thresholds identified in Mitigation Measure BIO-1. Identify appropriate lands that will support special-status plant species through habitat enhancement and management. Develop a Habitat Mitigation and Management Plan (HMMP) for populations to be preserved 	 Prior to maintenance Prior to maintenance Prior to maintenance Prior to maintenance During and Post- maintenance 	

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
 support equal or greater numbers (and health) of individuals of that species and (b) contain sufficient unoccupied habitat to allow for an increase in populations, the increase being at least equivalent to the number impacted, through habitat enhancement and management. For determining the number of individuals impacted, the highest number of individuals known to be present within the impact area within the prior 10 years (if the impact area has undergone multiple surveys in recent years) will be used to determine the magnitude of the impact to the entire population of the species. For populations to be preserved, the County will develop a Habitat Mitigation and Management Plan (HMMP), describing the measures that will be taken to enhance and manage the mitigation lands and to monitor the effects of management on special-status plant species. That plan will include, at a minimum, the following: a summary of impacts on special-status plant populations and the proposed mitigation; a description of the location and boundaries of the mitigation lands; a description of measures to be undertaken, if necessary, to enhance (e.g., through focused management) the mitigation site for the focal special-status plant species; a description of measures to transplant individual plants or seeds from the impact area to the mitigation site, if determined by a qualified botanist to be appropriate and to have a high likelihood of success; 	 that, at a minimum, meets all of the components identified in Mitigation Measure BIO-1. Provide CDFW and/or USFWS with HMMP for review. Implement HMMP. 		
• proposed management activities, such as managed grazing and			

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
management of invasive plants, to maintain high-quality			
habitat conditions for the focal special-status plant species;			
 habitat conditions for the focal special-status plant species; a description of species monitoring measures on the mitigation site, including specific, objective goals and objectives, performance indicators, success criteria, monitoring methods, data analysis, reporting requirements, and monitoring schedule. Determining specific performance/success criteria requires information regarding the specific mitigation site, its conditions, the biological resources present on the site, the specific plant species for which mitigation is being provided, and the specific enhancement and management measures tailored to the mitigation site and its conditions. The mitigation will be tied to number of individuals or area of occupied habitat that is directly impacted, and final success criteria will include a time frame in which the population will be expected to be recovered (e.g., after five years, the mitigation population will support at least as many individuals as were 			
impacted). In addition, the success criteria will be tied to a			
nearby reference population to control for regional and			
temporal variation that will take into account events such as			
drought and climate fluctuations. Specific criteria will be			
defined in the HMMP rather than in this FEIR. Nevertheless,			
the performance/success criteria described in the HMMP will			
guide mitigation to manage and protect high-quality habitat			
for, and populations of, the impacted species; and			
 a description of the management plan's adaptive component, including potential contingency measures for mitigation elements that do not meet performance criteria. 			
After mitigation has been provided for impacts on special-status plant populations in a specific area from a specific year's activities, future			

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
(i.e., repetitive) impacts on that area will not require additional mitigation.			
If the compensatory mitigation is provided for federally-listed plant species, the HMMP will be provided to the USFWS for review. It is possible that this mitigation measure may be refined during the Section 7 consultation process with the USFWS (e.g., in the Biological Opinion covering Program effects on federally listed plant species), in which case the refinements required by the USFWS will be implemented. If compensatory mitigation is provided for state-listed plant species, the HMMP will be provided to the CDFW for review. It is possible that this mitigation measure may be refined during the consultation process with CDFW, in which case the refinements required by the CFDW will be implemented.			
 Mitigation Measure BIO-2: Establish Tree Protection Zones for Ground-disturbing Activities Near Butano Ridge Cypress If ground-disturbing activities are proposed and unavoidable within 50 feet of an individual of Butano Ridge cypress to be avoided, a tree protection zone (TPZ) will be established to protect those populations. In order to minimize the impacts on Butano Ridge cypress at a maintenance work area, the County will implement the following tree protection measure: Butano Ridge cypress trees that are within 50 feet of proposed program activities will be clearly marked for avoidance. Fenced enclosures for individual trees or groups of trees to be protected will be erected at the driplines of trees, where possible, or as established by the County biologist or another qualified biologist. Soil disturbance within this protection zone will not be permitted. 	 Retain a qualified biologist or County biologist to establish a TPZ around any Butano Ridge cypress within 50 feet of activities. Clearly mark trees for avoidance and install fencing around individual trees or groups of trees. 	 Prior to ground- disturbing activities Prior to ground- disturbing activities 	

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
 Mitigation Measure BIO-3: Monitor Temporary Impact from Vegetation Management Activities on "Disturbance-Tolerant" Special- Status Plant Species If vegetation management activities that could provide a long-term benefit to special-status plant species (e.g., grazing for thatch removal, invasive plant species removal, shrub and tree removal for fuel reduction, etc.) are proposed and impacts on special-status plant species are unavoidable and greater than a certain threshold (i.e., 10% for CRPR List 1 and 2 species and 20% for CRPR List 3 and 4 species [see Impact BIO-1C below]), the following measures will be implemented. If the vegetation management activity is likely to result in any amount of ground disturbance, then prior to implementation of the maintenance activity, the County will salvage plant material prior to disturbance. This could include removing and retaining the topsoil prior to the implementation of maintenance activities to salvage the seed bank and/or propagules, such as bulbs, corms, etc. Success criteria will be developed to evaluate the progress of the population following the maintenance activity. As with the development of the HMMP described under Mitigation Measure BIO-1 the specific plant species. The success criteria for this monitoring will depend on information regarding the specific site, its conditions, the biological resources present on the site, and the specific plant species. The success criteria will be tied to number of individuals or area of occupied habitat that is directly impacted, and final success criteria will be clearly state a timeframe in which the population will be expected to be recovered (e.g. after five years, the population will still support at least as many individuals as were impacted). In addition, the success criteria will be tied to a nearby reference population to control for regional and temporal variation that would take into account events such as 	 Salvage plant material if vegetation management activity will result in ground disturbance. Develop success criteria of populations and identify reference population. Conduct monitoring after first year of maintenance to confirm recovery. If plants are not recovering, retain a qualified botanist to develop a restoration plan and conduct three years of monitoring. If needed, provide compensatory mitigation for the loss of population as described in Mitigation Measure BIO-1. 	 Prior to ground disturbance Prior to ground disturbance Post- maintenance Post- maintenance Post- maintenance 	

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
 drought and climate fluctuations. The population must show evidence that it is recovering in the initial year following the maintenance activity. This requirement will be modified accordingly if the reference population is also in decline indicating that regionally the species is in decline for a reason other than the maintenance activity (e.g., drought). If plants are not observed to be recovering from the maintenance activity and the reference population is not in decline, then the County will work with a qualified botanist to develop a restoration plan for the impacted population, either using the salvaged plant material or plant material from the same watershed. The restoration plan will generally follow the format of the HMMP described in Mitigation Measure BIO-1, describing the measures that will be taken to enhance and manage the mitigation population and to monitor the development of the population towards specific success criteria. The County will monitor the impacted population for three years. By year three, the population needs to show an increasing trend toward improvement. If the population is not showing improvement, then the County will provide compensatory mitigation for the loss of that portion of the population as described in Mitigation Measure BIO-1. 			
Mitigation Measure BIO-4: Provide Compensatory Mitigation for the California Red-Legged Frog and California Tiger Salamander The County will compensate for the long-term loss of habitat for the California red-legged frog and/or California tiger salamander via the restoration, enhancement, and/or management of suitable habitat on County lands (either existing lands or lands that are acquired); financial contribution to local County based watershed, stewardship, or non- profit organizations that lead or coordinate habitat restoration or	 Identify appropriate compensation for breeding and upland dispersal or refugia habitat for California red-legged frog and California tiger salamander at ratio identified in mitigation measure and negotiated with USFWS and/or CDFW. 	 Post- maintenance Post- maintenance Post- maintenance Annually post- maintenance and during 	

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
 watershed improvement projects; or purchase of credits in a USFWS-approved conservation bank. Compensatory mitigation for permanent loss of breeding habitat will be provided at a ratio of up to 3:1 (mitigation:impact). Compensatory mitigation for long-term loss of upland dispersal or refugial habitat will be provided at a ratio of up to 2:1 (mitigation:impact), on an acreage basis. The required mitigation ratio will be negotiated annually with the USFWS (and CDFW for impacts on the California tiger salamander) based on the types and quality of habitat impacted during each year's maintenance activities. For any mitigation efforts, the County will ensure adequate monitoring to document that the mitigation is operational and successfully providing the functions and valued needed to offset potential program impacts. The County will prepare an HMMP describing the measures that will be taken to manage the property and to monitor the effects of management on the California red-legged frog and/or tiger salamander; the HMMP will include, at a minimum, the following: a summary of impacts on red-legged frog and/or tiger salamander habitat and populations, and the proposed mitigation; a description of measures to be undertaken, if necessary, to enhance (e.g., through focused management) the mitigation site for red-legged frogs and/or tiger salamander; proposed management activities, such as managed grazing, management of invasive plants, measures targeted at sustaining populations of burrowing mammals, or other measures to maintain high-quality habitat for red-legged frogs and/or tiger salamander; 	 Develop HMMP that defines specific performance/success criteria tailored to the specific mitigation site and its conditions. Implement HMMP. Conduct monitoring for 3 to 5 years to document whether success criteria are achieved and communicate monitoring results annually as part of the proposed program's annual reporting process. 	development of the annual report	

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
a description of species monitoring measures on the mitigation			
site, including specific, objective goals and objectives,			
performance indicators, success criteria, monitoring methods,			
data analysis, reporting requirements, and monitoring			
schedule. Determining specific performance/success criteria			
requires information regarding the specific mitigation site, its conditions, and the specific enhancement and management			
measures tailored to the mitigation site and its conditions.			
• a description of the management plan's adaptive component,			
including potential contingency measures for mitigation			
elements that do not meet performance criteria; and			
• a description of the funding mechanism for the long-term			
maintenance and monitoring of the mitigation lands.			
Determining specific performance/success criteria for this mitigation			
requires information regarding the specific mitigation site, its			
conditions, and the specific enhancement and management measures			
tailored to the mitigation site and its conditions. For example,			
performance criteria for a mitigation site providing only upland habitat			
for California red-legged frogs would include the maintenance of			
grassland habitat of a suitable height and density for use by dispersing frogs, whereas a mitigation site providing red-legged frog breeding			
habitat would also include criteria related to adequate depth and			
hydroperiod of breeding habitat and suitable vegetative cover. As a			
result, those specific criteria will be defined in the HMMP rather than in			
this EIR. Nevertheless, the performance/success criteria described in			
the HMMP will include, at a minimum, the maintenance of suitable			
habitat conditions for the species for which mitigation is being			
provided. Those criteria will guide the mitigation to manage and protect			
high-quality habitat for the California red-legged frog and California			
tiger salamander, adequate to compensate for impacts.			

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
For County-led mitigation projects, the County will be responsible to monitor such projects for a period of 3 to 5 years depending upon the type of mitigation project. For watershed partnering mitigation projects in which the County serves as a partner funding the mitigation through an agency such as the San Mateo Resource Conservation District (RCD), it is anticipated that the local partner (RCD) will monitor and provide reporting on the site for a period of 3 to 5 years. While it is the watershed partner's responsibility to monitor site conditions, it will be the County's responsibility to communicate monitoring results annually as part of the County Maintenance Program's reporting process. After mitigation has been provided for impacts on a specific area supporting the California red-legged frog and California tiger salamander from a specific year's activities, future (i.e., repetitive) impacts on that area will not require additional mitigation.			
Mitigation Measure BIO-5: Provide Compensatory Mitigation for the San Francisco Garter Snake The County will compensate for the long-term loss of habitat for the San Francisco garter snake via the restoration, enhancement, and/or management of suitable habitat on County lands (either existing lands or lands that are acquired); financial contribution to local County based watershed, stewardship, or non-profit organizations that lead or coordinate habitat restoration or watershed improvement projects; or purchase of credits in a USFWS-approved conservation bank. Compensatory mitigation for permanent loss of breeding habitat will be provided at a ratio of up to 3:1 (mitigation:impact), and compensatory mitigation for long-term loss of upland dispersal or refugial habitat will be provided at a ratio of up to 2:1 (mitigation:impact), on an acreage basis. The required mitigation ratio will be negotiated annually with the USFWS and CDFW, based on the types and quality of habitat impacted during each year's maintenance activities.	 Identify appropriate compensation for breeding and upland dispersal and refugia habitat for San Francisco garter snake at a ratio identified in mitigation measure and negotiated with USFWS and CDFW. Develop HMMP that defines specific performance/success criteria tailored to the specific mitigation site and its conditions. Implement HMMP. Conduct monitoring for 3 to 5 years to document whether success criteria are achieved and communicate monitoring results annually as part of the proposed 	 Post- maintenance Post- maintenance Post- maintenance Annually post- maintenance and during development of the annual report 	

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
For any mitigation efforts, the County will ensure adequate monitoring to document that the mitigation is operational and successfully providing the functions and valued needed to offset potential Maintenance Program impacts. The County will develop an HMMP, which will include components similar to those described for the California red-legged frog and California tiger salamander in Mitigation Measure BIO-4. For County-led on-site and off-site mitigation projects, the County will be responsible to monitor such projects for a period of 3 to 5 years depending upon the type of mitigation project. For watershed partnering mitigation projects in which the County serves as a partner funding the mitigation through an agency such as the RCD, it is	program's annual reporting process		
anticipated that the local partner (RCD) will monitor and provide reporting on the site for a period of 3 to 5 years. While it is the watershed partner's responsibility to monitor site conditions, it will be the County's responsibility to communicate monitoring results annually as part of the County Maintenance Program's reporting process. After mitigation has been provided for impacts on a specific area supporting the San Francisco garter snake from a specific year's activities, future (i.e., repetitive) impacts on that area will not require additional mitigation.			
Mitigation Measure BIO-6: Pre-Activity Survey and Avoidance Prior to ground-disturbing program activities in high-quality burrowing owl habitat (i.e., extensive grasslands with abundant ground squirrel burrows, and possibly other habitats such as ruderal habitat or open scrub if determined by a qualified biologist to provide suitable burrowing owl roosting habitat), a focused pre-activity survey will be conducted for burrows occupied by migrant or overwintering burrowing owls. Surveys will be conducted by a qualified biologist (i.e., one who is familiar with burrowing owl ecology and experienced in performing surveys for them) no more than 14 days prior to	 Retain a qualified biologist to determine if suitable burrowing owl roosting habitat is present, and if necessary; Retain qualified biologist to conduct pre-activity survey. Conduct one additional site survey if suitable burrows are identified. 	 Prior to ground disturbance No more than 14 days prior to ground disturbance No more than 24 hours prior to ground disturbance 	

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
commencement of ground-disturbing activities. These surveys will be conducted in accordance with the CDFW's 2012 Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012) or any more current equivalent should new guidelines be released before the activity is initiated. Although burrowing owls are not expected to breed in the program area, pre-activity surveys will be conducted year-round due to the potential for dispersing juveniles or failed breeders from South Bay breeding populations (in addition to migrants and wintering birds present during the nonbreeding season) to occupy burrows in the program area during breeding season. During the initial site visit, which will be conducted no more than 14 days prior to the start of construction, a qualified biologist will survey the activity area and (to the extent that access allows) habitat within 250 feet of the site for burrowing owls and suitable burrowing owl habitat (i.e., ground squirrel burrows). If no burrows suitable for use by burrowing owls are present, no additional surveys will be required. However, if suitable burrows are determined to be present, the qualified biologist will visit the site one additional time to investigate each burrow for signs of owl use and to determine whether owls are present in areas where they could be affected by the proposed activities. This site visit will take place no more than 24 hours prior to the start of ground disturbing activities. If an occupied burrow(s) is found, impacts on the burrow will be avoided by the implementation of a construction-free buffer around the occupied burrow. The size of the buffer will be determined by the qualified biologist but will be sufficient to ensure the occupied burrow is not damaged. No ground-disturbing program activities will commence within the buffer area until a qualified biologist confirms that the burrow is no longer occupied. If impacts on occupied burrows are unavoidable, passive relocation techniques will be used to evict owls from burrows with	 If occupied burrow(s) is found, retain a qualified biologist to determine size of a construction- free buffer and implement buffer around the occupied burrows are unavoidable, passively relocate individuals outside of the breeding season (February 1 through August 31). 	 Prior to ground disturbance Prior to ground disturbance 	

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
evicted during the breeding season (February 1 through August 31) unless a biologist can determine that owls are not actively nesting.			
Mitigation Measure BIO-7: Provide Alternative Bat Roost Habitat If a tree containing a pallid or Townsend's big-eared bat maternity roost, or a large non-maternity roost (i.e., ≥ 10 individuals), is to be removed by proposed program activities, a qualified bat biologist will design and determine an appropriate location for an alternative roost structure. If a tree containing a pallid or Townsend's big-eared bat maternity roost or large non-maternity roost is not removed, but program-related disturbance causes the abandonment of the roost site (even during the non-breeding season), then the County will either monitor the roost site to determine whether the affected species returns to the roost, or construct an alternative roost. If the County elects to monitor the roost and bats do not return within one year, an alternative roost structure, based on the location of the original roost and habitat conditions in the vicinity, and oversee installation of a new roost structure. The roost structure either will be built to specifications determined by a qualified bat biologist, or will be purchased from an appropriate vendor (though a qualified bat biologist should approve the type of structure purchased). The structure will be placed as close to the affected roost site as feasible. The County will monitor the roost for up to three years (or until occupancy is determined, whichever occurs first) to determine use by bats. If, by Year 3, pallid bats or Townsend's big-eared bats are not using the structure, a qualified bat biologist, in consultation with CDFW, will identify alternative roost at the agreed- upon location, and monitor the new roost for an additional three years (or until occupancy has been verified).	 Retain a qualified biologist to identify trees with pallid or Townsend's big-eared bat maternity roost or large non- maternity roost. Retain a qualified bat biologist to determine an appropriate alternative roost structure if tree will be removed. If roost is abandoned, monitor the roost site or construct an alternative roost. Monitor, the alternative roost structure for 3 years (or until occupancy is determined) If roost is not occupied, retain qualified biologist to consult with CDFW to identify alternative roost design and location, install new roost, and monitor for 3 years (or until occupancy is verified). 	 Prior to maintenance Prior to maintenance During and post- maintenance Post- maintenance Post- maintenance 	

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
 Mitigation Measure BIO-8: Provide Compensatory Mitigation for Woody Riparian Vegetation The compensatory mitigation package, which is incorporated into the proposed Program, will be implemented to compensate for impacts on woody riparian vegetation. By April 30 of each year, the County would notify the relevant regulatory agencies (i.e., those agencies with jurisdictional authority or oversight) of the year's planned maintenance projects. The relevant regulatory agencies would be provided with information describing proposed maintenance project activities, locations, natural resource conditions, and any other key resource issues. The notification package would describe which ground-disturbing maintenance activities would result in impacts on temporary and permanent impacts on riparian habitat. It would also describe in detail the County's proposal for providing compensatory mitigation for those impacts and may include one or more options described in Chapter 2, Section 2.7.3 and summarized below. 	 Identify and notify applicable regulatory agencies of proposed activities as part of the annual notification process. Identify impacts to woody riparian vegetation and provide on-site or off-site mitigation at the ratios described in the Mitigation Measure BIO-8. 	 Annually, by April 30th of each year prior to maintenance Prior to and during maintenance 	
For regular maintenance activities that have potential to remove some riparian habitat, the preferred mitigation approach is on-site mitigation. The general on-site mitigation approach is to restore the type of habitat that is impacted by maintenance activities in the same project vicinity or stream reach where the disturbance has occurred. For example, for creek bank stabilization projects, the County would seek to implement biotechnical solutions, as conditions allow, to avoid or minimize the potential hardening of creek banks. For many program activities, this will occur as part of implementing one of the biotechnical Erosion Control BMPs (e.g., BMPs EC-1 through EC-14). For example, implementing EC-1: Brush Layering, EC-2: Brush Packing, EC-3: Live Staking, or EC-4: Live Pole Drain, would involve using willow stakes (and other woody native material that can re-sprout) as a biotechnical repair			

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
technique would result in the re-establishment of woody riparian			
habitat in-place following maintenance activities.			
For on-site, in-kind mitigation, the County will restore, preserve, and			
manage riparian habitats, or substantially improve the quality of highly			
degraded riparian habitats at a ratio of 1.5:1, meaning 1.5 acres of			
riparian habitat will be restored/created for every 1 acre of riparian			
habitat impacted by proposed program activities.			
Where on-site mitigation is not possible, off-site mitigation can provide			
opportunities for in-kind mitigation that aligns with the functions and			
values of natural resources that are potentially impacted by the			
proposed program but is done at a different location than where the			
maintenance occurs. The general approach is to conduct off-site			
mitigation within the same watershed or general region as where the			
maintenance activities occur. This type of mitigation is similar to the on-			
site option in that the focus is to provide in-kind habitat enhancement			
or restoration, stream functional improvement, water quality benefits,			
or overall watershed health improvements that offset maintenance			
impacts or reduce the need for maintenance. Several off-site mitigation			
options are identified in the Maintenance Manual (Appendix A),			
including future restoration efforts at the San Vicente Creek			
Enhancement Project, future projects within Pescadero Creek Park,			
invasive plant and tree removal on Park lands, gully repair and large			
woody debris implementation projects in the Pescadero-Butano Creek			
watershed, invasive plant removal at Quarry Park in Half Moon Bay,			
creek restoration in Junipero Serra County Park, and removal of			
concrete from El Zanjon Creek.			
For off-site, in-kind mitigation for riparian habitat, the County will			
acquire, preserve, enhance, and manage lands that provide similar			
ecological functions and values to the riparian impacted by program			
maintenance activities. The acquisition and preservation/enhancement			
of these higher quality lands will occur at a ratio of 3:1, meaning 3 acres			
of riparian shall be acquired, preserved, and enhanced for every 1 acre			

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
of riparian habitat impacted by proposed Program activities. Enhancement may include modification of existing management, limited planting, or invasive plant removal, or other activities to enhance riparian/aquatic habitat functions and values. Other options for compensatory mitigation include establishing conservation easements or deed restrictions, partnering with local San Mateo County based watershed, stewardship, or non-profit organizations that lead or coordinate habitat restoration or watershed improvement projects.			
Mitigation Measure BIO-9: Provide Compensatory Mitigation for Impacts on Wetlands and other Waters By April 30 of each year, the County would notify the relevant regulatory agencies (i.e., those agencies with jurisdictional authority or oversight) of the year's planned maintenance projects. The relevant regulatory agencies would be provided with information describing proposed maintenance project activities, locations, natural resource conditions, and any other key resource issues. The notification package would describe which ground-disturbing maintenance activities would result in impacts on temporary and permanent impacts on wetlands or waters of the U.S. and state. Wetlands that are considered waters of the U.S./state will be identified on the basis of presence of all three parameters for jurisdictional wetlands – hydrophytic vegetation, wetland hydrology, and hydric soils. In the Coastal Zone, features will be delineated as wetlands under the Coastal Act if they possess any one of those three parameters. The notification package would also describe in detail the County's proposal for providing compensatory mitigation for those impacts and may include one or more options described in Chapter 2, Section 2.7.3 and summarized below. For routine maintenance activities located outside of tidal wetland/other waters habitat within the USACE jurisdiction, the preferred mitigation approach is on-site mitigation. The general on-site	 Identify and notify applicable regulatory agencies of proposed activities as part of the annual notification process. Identify impacts to wetlands and other waters and provide on- site, off-site, and out-of-kind mitigation at the ratios described in the Mitigation Measure BIO-9. Coordinate purchase of wetland mitigation credits with USACE and RWQCB. 	 Annually, by April 30th of each year prior to maintenance Prior to and during maintenance 	

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
mitigation approach is to restore the type of habitat that is impacted by maintenance activities in the same project vicinity or stream reach where the disturbance has occurred. For example, for creek bank stabilization projects, the County would seek to implement biotechnical solutions, as conditions allow, to avoid or minimize the potential hardening of creek banks.			
For on-site, in-kind mitigation, the County will restore, preserve, and manage wetlands and aquatic habitats, or substantially improve the quality of highly degraded wetlands and aquatic habitats at a ratio of 1.5:1, meaning 1.5 acres of wetlands or other waters shall be restored/created for every 1 acre of wetlands and other waters permanently impacted by program activities.			
Where on-site mitigation is not possible, off-site mitigation can provide opportunities for in-kind mitigation that aligns with the functions and values of natural resources that are potentially impacted by the program but is done at a different location than where the maintenance occurs. The general approach is to conduct off-site mitigation within the same watershed or general region as where the maintenance activities occur. This type of mitigation is similar to the on- site option in that the focus is to provide in-kind habitat enhancement or restoration, stream functional improvement, water quality benefits, or overall watershed health improvements that offset maintenance impacts or reduce the need for maintenance. Several off-site mitigation options are identified in the Maintenance Manual (Appendix A), including future restoration efforts at the San Vicente Creek Enhancement Project, future projects within Pescadero Creek Park, invasive plant and tree removal on Park lands, gully repair and large woody debris implementation projects in the Pescadero-Butano Creek watershed, invasive plant removal at Quarry Park in Half Moon Bay, creek restoration in Junipero Serra County Park, and removal of concrete from El Zanjon Creek.			

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
For off-site, in-kind mitigation, the County will acquire, preserve, enhance, and manage lands that provide similar ecological functions and values to the wetlands and other waters impacted by Program maintenance activities. The acquisition and preservation/enhancement of these higher quality lands will occur at a ratio of 3:1, meaning 3 acres of wetlands or other waters shall be acquired, preserved, and enhanced for every 1 acre of wetlands and other waters impacted by Program activities. Enhancement may include modification of existing management, limited planting, or invasive plant removal, or other activities to enhance wetland/aquatic habitat functions and values. Other options for compensatory mitigation include establishing conservation easements or deed restrictions, partnering with local San Mateo County based watershed, stewardship, or non-profit organizations that lead or coordinate habitat restoration or watershed improvement projects, or the purchase of mitigation credits from the a wetland mitigation bank. The mitigation ratio for purchase of mitigation credits will be determined through coordination with the owner of any bank that is approved in the future, as well as with the USACE and RWQCB.		Schedule	
For out-of-kind preservation of watershed lands as a means of compensatory mitigation, the acquisition of more general watershed conservation lands will occur at a ratio of 8:1, meaning 8 acres of land shall be acquired and restored for every 1 acre of impacted habitats resulting from proposed program activities. For the purchase of mitigation credits mitigation will occur at a ratio of 1:1.			
Cultural Resources			
None required.			
Geology, Soils, Seismicity, and Mineral Resources			
None required			

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
Greenhouse Gas Emissions and Energy Use	·		
None required			
Hazards and Hazardous Materials	·		
Mitigation Measure HAZ-1: Proper Handling and Disposal of Contaminated Soil, Sediment, and Groundwater Prior to initiating ground-disturbing activities, the County or its contractors will inspect the soil, sediment, or groundwater for the presence of possible contamination. If indicators of contamination (e.g., foul odor, staining or sheen, etc.) are found, the County or its contractors will then test the soil. If the lab results confirm contamination is present, the soil, sediment, or groundwater will be treated as hazardous and dispose of the material at an approved hazardous waste disposal facility. In removing potentially contaminated soil, sediment, or groundwater, workers will wear protective clothing and equipment to limit their exposure.	 Inspect soil, sediment, or groundwater and test soil if indicators of contamination are found. Properly dispose of contaminated soil/hazardous materials at a hazardous waste facility. 	 Prior to ground disturbance During and post- maintenance 	
Mitigation Measure HAZ-2: Review of Proximity to Existing Known Hazardous Materials Clean-up Sites and Implementation of Safety Precautions The County and/or its contractors will evaluate the proximity of proposed maintenance sites that involve ground-disturbing activities to existing known hazardous material clean-up sites. This review will include examination of the planned maintenance activity footprint in relation to records of hazardous materials sites in the State Water Resources Control Board's GeoTracker database and the Department of Toxic Substances Control's EnviroStor database. If the proposed maintenance activity is located on or within 100 feet of a documented hazardous material contamination site, for which clean- up activities have not been completed or been successful, the County and/or its contractors will commission a Phase I Environmental Site Assessment to more fully characterize the past land uses and potential	 Evaluate proximity of ground- disturbing activities to existing hazardous material clean-up sites identified in the GeoTracker and EnviroStor databases. If maintenance activity is within 100 feet of a documented hazardous material contamination site at which clean-up activities have not been completed or been successful, retain a hazardous materials specialist to prepare a Phase I ESA. If the Phase I ESA indicates that contamination will likely 	 Prior to ground disturbance Prior ground disturbance Prior to ground disturbance During ground disturbance 	

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
for soil and/or groundwater contamination to occur at or in close proximity to the site.	remains, retain a hazardous materials specialist to prepare a Phase II ESA.		
If the Phase I Environmental Site Assessment demonstrates a reasonable likelihood that contamination remains within the proposed maintenance activity's area of disturbance, the County and/or its contractors will commission a Phase II Environmental Site Assessment, including soils testing, to characterize the extent of the contamination and develop ways to avoid the contaminated areas during maintenance activities. The County will follow all recommendations of the Phase II Environmental Site Assessment and conduct the proposed maintenance to avoid areas of contamination, to the extent feasible. In the event that it is not feasible to avoid all areas of contamination, the County and/or its contractors will follow all applicable laws regarding management of hazardous materials and wastes. This includes proper disposal of any contaminated soil in a hazardous waste landfill and ensuring that workers are provided with adequate personal protective equipment to prevent unsafe exposure.	 Implement recommendations included in the Phase II ESA and follow all applicable laws regarding disposal of hazardous materials and waste. 		
Hydrology and Water Quality			
None required			
Land Use and Planning	•		·
None required			
Noise	•		
Mitigation Measure NOI-1: Employ Noise-Reducing Maintenance Practices The following measures will be implemented by the County to reduce adverse effects from maintenance activity noise in locations where noise-sensitive receptors could be adversely affected:	 Include noise-reducing maintenance practices in construction documents. Identify appropriate locations for stationary equipment away from noise-sensitive land-uses. 	 Prior to maintenance Prior to maintenance During maintenance 	
Locate stationary equipment as far as practical from noise-	3. Use electrified construction equipment when practical; use	4. During maintenance	

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
 sensitive land uses; Use electrified or otherwise quieter equipment when practical; Use sound-control devices on equipment that are more effective than devices originally provided on the equipment; Use noise-reducing enclosures around noise-generating equipment; and Install temporary barriers between noise sources and noise-sensitive land uses, or take advantage of existing barrier features (e.g., terrain and structures) to block sound transmission. When determining haul truck routes, consideration will be given to altering haul routes to avoid sensitive receptors when feasible. 	 sound-control devices on equipment; use noise-reducing enclosures around equipment; and install barriers to reduce noise. 4. Use haul truck routes that avoid sensitive receptors. 		
Mitigation Measure NOI-2: Advance Notification of Nearby Sensitive Receptors The County will notify sensitive receptors located within 400 feet of maintenance sites at least one week prior to performing maintenance work.	 Notify of sensitive receptors within 400 feet of work site. 	Prior to maintenance	
Mitigation Measure NOI-3: Limit Nighttime Construction Noise When feasible, the County will ensure that no construction activities are conducted in close proximity (500 feet) to a residence outside the hours of 8:00 a.m.–5:30 p.m. on weekdays (or the applicable specific hours permitted by the local jurisdiction if extended outside of this time period) unless a special exemption permit allowed by the local jurisdiction is obtained.	 Include nighttime construction hours in contract documents. Identify work sites that are in close proximity (within 500 feet) of residences. Ensure that maintenance activities within 500 feet of residences occurs during the day 	 Prior to maintenance Prior to maintenance During maintenance 	

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Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials
	(i.e., 8:00 a.m. to 5:30 p.m.) and permitted by local jurisdiction.		
 Mitigation Measure NOI-4: Implement Vibration Reduction Measures The County will implement the following vibration-reducing measures during construction activities which could generate substantial vibration to minimize impacts on nearby sensitive receptors: Ensure proper tuning of vibration-causing equipment. Use vibration damping devices to the extent feasible. Limit use of vibratory equipment to the extent feasible and do not overlap use of vibratory equipment. Where possible, maintain a distance of 20+ feet from buildings. Use electric stationary equipment (e.g., generators) where feasible. Implement noise and/or vibration shields, such as sound aprons or temporary enclosures with sound-absorbing material, on or around construction equipment. For all maintenance activities involving the use of construction equipment or hauling trucks occurring within 75 feet of residences at any time of day, install a temporary noise and vibration barrier between the project site and the nearest sensitive receptors. Following the completion of maintenance activities within that distance, the barrier will be removed. 	 Include vibration reducing measures in contract documents. For maintenance activities that involve use of vibration- generating equipment (bulldozers, rollers, loaded trucks) near sensitive receptors, Implement vibration-reducing measures, including proper tuning of equipment, using vibration damping devices, limiting use of vibratory equipment, using electric stationary equipment, and installing noise/vibration shields. Identify locations where the use of equipment or hauling trucks will occur within 75 of residences and install vibration barriers. 	 Prior to maintenance During maintenance Prior to and during maintenance 	
Mitigation Measure NOI-5: Employee Best Management Practices at Airports The County will require that employees performing any maintenance activities within an airport are supplied with and wear personal protective equipment (i.e., noise-reducing headphones or earplugs) to	 Identify work sites within a County-owned airport (San Carlos and Half Moon Bay Airports) and supply all employees with personal protective equipment. 	 Prior to maintenance Prior to maintenance 	

Mitigation Measure	Monitoring and Reporting Action	Implementation Schedule	Completion Date and Initials	
protect against excessive noise levels. Further, to the extent feasible, maintenance activities would be performed during periods of time when the frequency of plane landings/takeoffs is minimal.	 Coordinate with the San Carlos and Half Moon Bay airports to determine time periods when the frequency of plane landings/takeoffs is minimal Conduct maintenance activities during times when frequency of plane landings/takeoffs is minimal. 	3. During maintenance		
Public Services and Utilities				
None required				
Recreation				
None required				
Transportation and Traffic				
None required				
Tribal Cultural Resources	·	·		
None required				
Wildfire	·	·		
None required				

()**ATTACHNEN**

COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT



STATEMENT OF FINDINGS OF SIGNIFICANT IMPACTS AND REJECTION OF ALTERNATIVES

Pursuant to Public Resources Code Section 21081 and Section 15091 of the California Environmental Quality Act (CEQA) Guidelines (14 California Code of Regulations 15000, et seq.), the County of San Mateo (County) cannot approve a project for which an Environmental Impact Report (EIR) has been certified which identifies significant effects on the environment unless it adopts findings with respect to each significant effect. Prior to approving the County of San Mateo Routine Maintenance Program (proposed program or project), the County must also find that there are specific considerations that make infeasible the project alternatives identified in the EIR.

In Section A below, the County will make one or more of the following findings for each of the significant effects identified in the EIR, pursuant to Section 15091 of the State CEQA Guidelines:

- 1. Changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.
- 2. Such changes or alterations are within the responsibility of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- 3. Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures identified in the EIR.

In Section B below, the County will make the following finding regarding each of the alternatives identified in the EIR:

Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the alternatives identified in the EIR.

SECTION A. FINDINGS REGARDING SIGNIFICANT IMPACTS

AIR QUALITY

Impact AQ-4: Result in Other Emissions Such as Odors Adversely Affecting a Substantial Number of People

Finding:

Maintenance activities associated with the proposed program would not generate permanent or long-term objectionable odors but could generate odors related to excavated material or stockpiled vegetation, smoke from burn piles, and the operation of gasoline- or diesel-powered equipment. Odors may also be associated with decaying organic material contained in excavated or dredged material, and vegetative debris piles as they are drying out prior to burning. Odors associated with these organic material piles may result in a potentially significant impact on local sensitive receptors if the piles remain on site and are in close proximity to sensitive receptors. In addition, smoke from burn piles could potentially result in significant odor-related impacts if the burn activities were conducted near sensitive receptors and in such quantities that a substantial number of people were affected. County would only perform burn activities temporarily at any given location and primarily in the following County Parks: Edgewood County Park, San Bruno Mountain State and County Park, San Pedro Valley Park, Huddart Park, Wunderlich County Park, Sam McDonald County Park, Memorial County Park, and Pescadero Creek County Park. Several of these parks are not located near densely populated areas (e.g., Sam McDonald, Memorial and Pescadero Creek County parks). Note that because much of the proposed vegetation management areas where burn piles would be used are in open space areas, the density of residential uses is much lower than in urban/dense areas of San Mateo County.

Implementation of best management practice (BMP) BIO-23 (Burn Pile Measures)requires burning to occur on days when wildfire danger is low, coordination with California Department of Forestry and Fire (CAL FIRE), and compliance with the Bay Area Air Quality Management District's (BAAQMD's) regulations pertaining to burn piles. However, potential impacts of stockpiling and burning activities could still result in odor effects on nearby sensitive receptors.

Implementation of Mitigation Measure AQ-1 would reduce this impact to a less-than-significant level.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

The potentially significant effects listed above can be reduced to a less-than-significant level by incorporating the following mitigation measure identified in the EIR:

<u>Mitigation Measure AQ-1: Locate Stockpiles of Odorous Materials and Pile Burning Activities at a Distance from Sensitive Receptors</u>

The County or its contractor(s) will be required to handle stockpiles of potentially odorous excavated or dredged material, or other potentially odorous materials, in a manner that avoids affecting residential areas or other sensitive receptors to the extent feasible. Stockpiles will be

placed as far as possible from these receptors and will be covered if immediate off-site disposal is not feasible. Stockpiles for pile burning and pile burning activities will be located as far from sensitive receptors as possible.

BIOLOGICAL RESOURCES

Impact BIO-1: Potential Adverse Effects on Special-Status Plant or Animal Species

Finding:

BIO-1A: State and/or Federally-Listed Special-Status Plants

There are 14 state and/or federally listed (listed) or candidate plant species that are either known to occur or have potential to occur in the program area. Five of these species are strictly serpentine endemics which are found in one of the four main areas of serpentine habitats in San Mateo County. These areas are Edgewood Park, The Triangle, Crystal Springs Reservoir, and Pulgas Ridge. Thus, only maintenance activities in these locations have potential to adversely affect these serpentine-associated listed plants.

All other listed species have highly restricted ranges or are only known from a single location in San Mateo County. Butano Ridge cypress is endemic to San Mateo County and is known only from Butano Ridge within Pescadero Creek County Park; Hickman's cinquefoil is known only from a single location near a county road outside the town of Montara; San Francisco lessingia is known only from one location near Hillside Park in Daly City near the base of San Bruno Mountain; San Bruno Mountain manzanita and Pacific manzanita are restricted to San Bruno Mountain County Park; coast yellow leptosiphon is known from a single location on Vallemar Bluff at the northern edge of the Fitzgerald Marine Reserve; and Point Reyes meadowfoam is known in San Mateo County from a single location found along a county road just outside of Butano State Park. Dudley's lousewort is known from slightly more locations, but still limited to knowns locations in Pescadero Creek Park, Portola Redwood State Park, and Pescadero Marsh and State Beach. Because San Francisco popcorn flower is known from a single extant population located outside of the program area (i.e., in a coastal prairie on private property across Highway 1 from Año Nuevo State Park) no program impacts on this species are anticipated.

Due to the limited ranges of these species, only maintenance activities in the locations specified above are likely to adversely affect these listed plants. Certain maintenance activities with the greatest degree of ground disturbance, such as bank stabilization and bridge replacements, are not projected in these locations. Therefore, there is a very low probability that these listed species would be impacted by program activities. However, other program activities could potentially occur in these locations or in nearby locations where there is suitable habitat for these species but where surveys have not been conducted.

Bank stabilization, culvert, storm drainage, channel, bridge, roadside ditch, and green infrastructure (GI) repair and maintenance activities may impact listed plant species through temporary loss and degradation of suitable habitat due to the alteration of hydrology through soil compaction and the introduction of non-native species. Individual plants and populations may be lost due to mechanical or physical removal of vegetation at the work site, and damage to listed plants may occur as a result of crushing by equipment, trampling by personnel, compaction of soil, and minor fuel and oil spills.

Vegetation management and road and trail maintenance activities may result in the alteration of habitat (including the introduction of non-native species), the introduction and spread of pathogens such as Phytophthora, and/or direct damage and mortality of listed plant species as a result of mechanical or physical removal of vegetation or off target herbicide contact via drift.

Implementation of several BMPs including BIO-1 (Environmental Awareness Training), BIO-16 (Avoid Special-Status Plant Species), BIO-17 (Sudden Oak Death Controls), BIO-18 (Invasive Plant Controls), BIO-23 (Burn Piles), BIO-24 (Pathogen Control), GEN-1 (Staging and Access), GEN-2 (Minimize Area of Disturbance and Site Maintenance), GEN-6 (Hazardous Materials Storage/Disposal), GEN-7 (Spill Prevention and Control), GEN-9 (Vehicle Maintenance and Parking), GEN-10 (Equipment Maintenance & Fueling), and GEN-19 (Dust Management Controls) would reduce impacts on listed plant species. However, even with implementation of BMPs, residual impacts may remain because avoidance of impacts on 95% or more of a given population may not be feasible. If it is determined that impacts on plant species are unavoidable and greater than 5% of a population would be impacted, such impacts would be significant because of the regional rarity of these species and therefore the magnitude of the potential impact on regional populations of these species.

With implementation of Mitigation Measures BIO-1 and BIO-2, impacts on state and/or federally listed plant species would be less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

BIO-1B: CRPR 1B or 2 Plants

There are 50 special-status plant species listed in the CNPS Rare Plant inventory as CRPR 1B or 2, and are either known to occur or have potential to occur in San Mateo County where proposed program activities could take place. As noted for listed plants above, some special-status plants listed as CRPR 1B or 2 have a lower likelihood of being impacted by program activities. This is due to their limited distribution or their occurrence in restricted habitats where no program activities are projected to occur in the next 5 to 10 years.

Similar to the impacts on listed plants described above for bank stabilization, culvert, storm drain, channel, bridge, roadside ditch, and GI repair and maintenance activities may impact CRPR 1B or 2 special-status plant species through temporary loss and degradation of suitable habitat due to the alteration of hydrology through soil compaction, alteration of surface drainage patterns due to movement of heavy equipment, and the introduction of non-native species.

Potential impacts on CRPR 1B or 2 plant species as a result of vegetation management and road and trail maintenance activities would be similar to those described for listed plants above. However, due to the very localized and limited distribution of suitable habitat for these species, vegetation management and road and trail maintenance impacts on these species would be minimal, if they occur at all.

Implementation of several BMPs including GEN-1, GEN-2, GEN-6, GEN-7, GEN-9, GEN-10, GEN-19, in addition to BIO-1, BIO-16, BIO-17, BIO-18, BIO-23, and BIO-24 would avoid or minimize impacts on CRPR 1B or 2 plant species. BIO-16 would identify program activities that might

occur near populations of special-status plant species, identify occurrences of these plants near proposed work areas, identify measures to avoid those populations where feasible, and/or require implementation of measures to minimize impacts. Nevertheless, residual impacts may remain because proposed activities may not be able to avoid a large enough percentage of the population to prevent a substantial impact. If impacts on CRPR 1B or 2 plant species are unavoidable and greater than 10% of a population would be impacted, such impacts would be significant because of the potential to substantially reduce the size of the regional population.

Implementation of Mitigation Measures BIO-1 and BIO-3 would reduce the impact on all CRPR 1B or 2 special-status plant species to a level that is less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

BIO-1C: CRPR 3 or 4 Plants

Thirty-one special-status plant species are listed in the CNPS Rare Plant inventory as CRPR 3 or 4, and either known to occur or have potential to occur in San Mateo County where proposed program activities could take place. The potential impacts of proposed program activities on CRPR 3 or 4 plant species are similar for CRPR List 1B or 2. The mechanisms by which impacts are expected to occur for CRPR List 3 or 4 species are the same as that discussed previously for CRPR List 1B or 2. The difference is that CRPR List 3 or 4 plant species tend to be more widespread and abundant than CRPR List 1B or 2 species, and therefore are less likely to experience a significant impact.

Implementation of several BMPs including GEN-1, GEN-2, GEN-6, GEN-7, GEN-9, GEN-10, GEN-19, in addition to BIO-1, BIO-16, BIO-17, BIO-18, BIO-23, and 2 BIO-4 would avoid or minimize impacts on CRPR 3 or 4 plant species. Nevertheless, residual impacts may remain because Program activities may not be able to avoid a large enough percentage of the population to prevent a substantial impact. If impacts on CRPR 3 or 4 plant species are unavoidable and greater than 20% of a population would be impacted, such impacts would be significant because of their regional rarity and potential to substantially reduce the size of the regional population.

Implementation of Mitigation Measure BIO-3, coupled with implementation of Mitigation Measure BIO-1, would reduce impacts on all CRPR 3 or 4 special-status plant species to a less-than-significant level. This impact would be less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

BIO-1J: California Red-legged Frog and California Tiger Salamander

The California red-legged frog, federally listed as threatened, is found primarily in or adjacent to creeks and reservoirs west of the mountain ridges in the less urbanized portions of the program area. It is known to occur, or potentially occur, at numerous sites throughout the western portion of San Mateo County, including 75 of 81 sites where maintenance has been recently performed or where maintenance is likely to be necessary in the next 5 to 10 years. The California tiger salamander, federally and state listed as threatened, is known to occur, or potentially occurs, at only one anticipated routine maintenance site (i.e., near Alpine trail) that

either has been maintained by the County in recent years or would likely require maintenance in the next 5 to 10 years. Potential impacts on the California tiger salamander would be much more limited due to this species' much more limited distribution and abundance within the program area.

Potential impacts on the red-legged frog and tiger salamander as a result of bank stabilization and road and trail maintenance activities include injury or mortality of individuals by equipment, vehicle traffic, and worker foot traffic. Adults of both species often use existing animal burrows as refugia. Thus, individuals may also be crushed in their burrows by the passage of heavy equipment or trapped and suffocated. In addition, petrochemicals, hydraulic fluids, and solvents that are spilled or leaked from construction vehicles or equipment may kill individuals at any life stage. Equipment and boots of maintenance personnel could introduce or spread *Batrachochytrium dendrobatidis* (Bd), a pathogen that can result in impairment of health, and even mortality, of amphibians.

Substrate vibrations or seismic sounds may cause individual adult red-legged frogs or tiger salamanders to move out of refugia, exposing them to a greater risk of predation or desiccation, and may interfere with predator detection, resulting in a decrease in time spent foraging. Additionally, increases in human concentration and activity near suitable habitat may result in an increase in native and non-native predators that are attracted to trash left in the activity area.

Bank stabilization activities, including those that require dewatering and those that do not, may temporarily result in increased turbidity within and downstream from the footprint of the activities due to mobilization of fine sediments. Increased turbidity may impair the health of red-legged frog eggs or larvae, and make predator and prey detection more difficult. Further, any replacement of natural banks, or banks that are armored but that provide numerous refugia for red-legged frogs, tiger salamanders, or their prey, with banks that provide no such refugia (e.g., concrete crib walls or sacked concrete), could result in the loss of upland refugia in the form of crevices, cavities, or small mammal burrows. Such effects could also result in the displacement of invertebrates that serve as a food source for red-legged frogs and tiger salamanders.

In the program area, repair and maintenance activities have been required, or are projected to be required, at over 75 locations where the California red-legged frog has the potential to occur. However, maintenance activities are projected at only one location where the tiger salamander has the potential to occur. Potential impacts of culvert, storm drainage, channel, bridge, roadside ditch, GI repair and maintenance, vegetation management, road and trail maintenance activities are similar to the potential impacts of bank stabilization activities described above.

Implementation of BMPs including BIO-1, BIO-2 (Minimize Injury or Mortality of Fish and Amphibian Species during Dewatering), BIO-3 (California Red-legged Frog Protection Measures), BIO-4 (California Tiger Salamander Protection Measures), BIO-23, BIO-24, BMPs GEN-1, GEN-2, GEN-3 (Construction Entrances and Perimeter), GEN-5 (Non-Hazardous Materials), GEN-6, GEN-7, GEN-9, GEN-10, GEN-12 (Concrete, Grout and Mortar Application), GEN-13 (Exclude Concrete from Channel), GEN-14 (Concrete Washout Facilities), GEN-15 (Painting and Paint Removal), GEN-16 (Timing of Work), GEN-21 (Domestic Animals), 22 (Site Stabilization), BMPs EC-1 through EC-14 (various methods of erosion control), and BMPs SC-1 through SC-6 (various methods of sediment/water quality control) would reduce impacts on the California red-legged frog, California tiger salamander, and their habitat. However, residual

impacts would remain because complete avoidance of long-term impacts on habitat for these species may not be feasible. Because of the regional rarity of the California red-legged frog and California tiger salamander, the extent of potential impacts to California red-legged frog habitat (due to the species' broad distribution in the program area), and the importance of California tiger salamander habitat at the very northern edge of the species' San Mateo County range, any long-term loss of these species' habitat would be considered significant.

Implementation of Mitigation Measure BIO-4 would ensure impacts to California red-legged frog and California tiger salamander are less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

BIO-1K: San Francisco Garter Snake

The San Francisco garter snake, federally and state listed as endangered and state fully protected, could potentially occur at a limited number of routine maintenance sites in the western portion of San Mateo County. Many of the potential impacts on the San Francisco garter snake are similar to those described for the California red-legged frog, though due to the much more limited distribution and abundance of the San Francisco garter snake, impacts on the snake would be of much lower likelihood and magnitude than impacts on the red-legged frog.

Implementation of BMPs GEN-1, GEN-2, GEN-3, GEN-5, GEN-6, GEN-7, GEN-9, GEN-10, GEN-12, GEN-13, GEN-14, GEN-15, GEN-16, GEN-21, GEN-22, BIO-1, BIO-2, and BIO-5 (San Francisco Garter Snake Protection), along with, BMPs EC-1 through EC-14 and SC-1 through SC-6 would reduce impacts on this species. However, residual impacts would remain because complete avoidance of long-term impacts on habitat for this species may not be feasible. Because of the regional rarity of the San Francisco garter snake, any long-term loss of habitat would be considered significant.

Implementation of Mitigation Measure BIO-5 would thereby ensure that the proposed program does not substantially reduce the number or restrict the range of this special-status species, have substantial significant impacts on this species, or impede the use of its nursery sites. This impact would be less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

BIO-1N: Western Pond Turtle

Creeks, lakes, ponds, and freshwater marshes in the program area provide suitable habitat for the western pond turtle, a California species of special concern. However, this species is scarce and fairly locally distributed in the program area. Similar to the California red-legged frog impact discussion above, in the absence of BMPs, proposed program activities may result in the injury or mortality of turtles.

Implementation of BMPs GEN-1, GEN-2, GEN-3, GEN-5, GEN-6, GEN-7, GEN-9, GEN-10, GEN-12, GEN-13, GEN-14, GEN-15, GEN-16, GEN-21, GEN-22, BIO-1, BIO-2, and BIO-6 (Measures to Protect the Foothill Yellow-legged Frog, California Giant Salamander, Santa Cruz black Salamander, and Western Pond Turtle), along with, BMPs EC-1 through EC-13 and SC-1 through

SC-6 would reduce the impacts on this species. However, residual impacts would remain because it would not be feasible to avoid all individuals (particularly nests with eggs) and habitat loss while still meeting project goals and public health and safety directives. Western pond turtle populations in San Mateo County have been affected by other stressors including urbanization, capture by humans, construction of barriers between creeks and nesting areas. Thus, the loss of individuals or of important aquatic or upland habitat could reduce the viability of a population to the extent that it would be extirpated, a significant impact.

Implementation of Mitigation Measures BIO-8 and BIO-9 would reduce the impact on the western pond turtle to a level that is less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

BIO-1T: Burrowing Owl

The burrowing owl, a California species of special concern, prefers annual and perennial grasslands, typically with sparse or nonexistent tree or shrub canopies. This species is expected to occur in the program area only as a fairly rare migrant and winter visitor.

Program activities that result in the temporary or permanent loss of ground squirrel burrows (e.g., re-grading of roads/trails, trenching for culvert replacement/repair, and installation of hardscape for bank stabilization) may result in the degradation of habitat for migrant and wintering burrowing owls. Because burrowing owls roost underground, individuals may be crushed in their burrows by the passage of heavy equipment or trapped and suffocated.

Implementation BMPs GEN-1, GEN-2, GEN-3, GEN-5, GEN-6, GEN-7, GEN-9, GEN-10, GEN-21, BIO-1, and BIO-23 would minimize impacts on habitat for wintering or migrant burrowing owls. However, residual impacts on burrowing owls might occur due to the injury or mortality of individuals in their roost burrows. Loss of individuals might result in a substantial impact on the regional burrowing owl population because this species has experienced substantial regional losses in habitat and populations.

When occupied habitat must be impacted, Mitigation Measure BIO-6 would be implemented to reduce the impact on burrowing owls to a level that is less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

BIO-1CC: Pallid Bat and Townsend's Big-eared Bat

The pallid bat, a California species of special concern, occurs sporadically throughout open areas and along roads of the Pacific coastal regions and the Santa Cruz Mountains within the program area. The Townsend's big-eared bat, a California species of special concern, is a rare resident in the coastal region of the program area, potentially roosting in old mines, caves, very large cavities in redwood trees, and barns and abandoned buildings in the Santa Cruz Mountains. It has been extirpated from the flat Bayside lands of the eastern portion of the program area. In the absence of BMPs, program-related disturbance and removal or pruning of trees near a maternity roost of pallid or Townsend's big-eared bats could cause females to abandon their young. In addition, when trees containing roosting colonies or individual pallid bats or Townsend's big-eared bats are removed or modified, individual bats could be physically injured or killed; could be subjected to physiological stress from being disturbed during torpor; or could face increased predation because of exposure during daylight, a potentially significant impact. Such impacts could be significant because the species' populations are limited locally and regionally and loss of individuals may have a substantial adverse effect on local and regional populations of these species. Suitable roosting habitat is limited in the program area, and program activities that result in the permanent abandonment of a large roost (i.e., ≥ 10 individuals) would be a significant impact on habitat for the locally and regionally limited populations of pallid and Townsend's big-eared bats.

Implementation of BMPs BIO-1, BIO-14 (Measures to Protect Bat Colonies), GEN-1, and GEN-2 would reduce impacts on the pallid bat, Townsend's big-eared bat, and their roosting habitat. However, residual impacts would remain if complete avoidance of long-term impacts on roosting habitat for these species (e.g., removal of a high-quality roost site) is not feasible. This impact would be significant because these species' populations and available habitat are limited locally and regionally and because loss of a high-quality roosting site may have a substantial impact on local and regional populations of these species.

Implementation of Mitigation Measure BIO-7 would reduce the impact on roost sites for the pallid bat and Townsend's big-eared bat to a level that is less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating the following mitigation measures, identified in the EIR, will reduce these potentially significant effects to less-than significant levels:

Mitigation Measure BIO-1: Provide Compensatory Mitigation for Special Status Plant Species.

San Mateo County will provide compensatory mitigation for unavoidable impacts on specialstatus plant populations, where impacts on a special-status species' population is unavoidable and above the specified threshold (i.e., 5% for state or federally-listed species, 10% for CRPR List 1B and 2 species, and 20% for CRPR List 3 or 4 species – see impact discussions BIO-1B and BIO-1C above).

Compensation for unavoidable impacts on populations of special-status plants will be provided by a combination of preservation and enhancement of those species' populations outside program work sites. For impacts on populations (including partial populations) of a specific special-status plant species, compensatory mitigation will include preservation, enhancement, and management of lands that (a) already support equal or greater numbers (and health) of individuals of that species and (b) contain sufficient unoccupied habitat to allow for an increase in populations, the increase being at least equivalent to the number impacted, through habitat enhancement and management. For determining the number of individuals impacted, the highest number of individuals known to be present within the impact area within the prior 10 years (if the impact area has undergone multiple surveys in recent years) will be used to determine the magnitude of the impact to the entire population of the species. For populations to be preserved, the County will develop a Habitat Mitigation and Management Plan (HMMP), describing the measures that will be taken to enhance and manage the mitigation lands and to monitor the effects of management on special-status plant species. That plan will include, at a minimum, the following:

- a summary of impacts on special-status plant populations and the proposed mitigation;
- a description of the location and boundaries of the mitigation site and description of existing site conditions;
- a description of the funding mechanism to ensure the long-term maintenance and monitoring of the mitigation lands;
- a description of measures to be undertaken, if necessary, to enhance (e.g., through focused management) the mitigation site for the focal special-status plant species;
- a description of measures to transplant individual plants or seeds from the impact area to the mitigation site, if determined by a qualified botanist to be appropriate and to have a high likelihood of success;
- proposed management activities, such as managed grazing and management of invasive plants, to maintain high-quality habitat conditions for the focal specialstatus plant species;
- a description of species monitoring measures on the mitigation site, including • specific, objective goals and objectives, performance indicators, success criteria, monitoring methods, data analysis, reporting requirements, and monitoring schedule. Determining specific performance/success criteria requires information regarding the specific mitigation site, its conditions, the biological resources present on the site, the specific plant species for which mitigation is being provided, and the specific enhancement and management measures tailored to the mitigation site and its conditions. The mitigation will be tied to number of individuals or area of occupied habitat that is directly impacted, and final success criteria will include a time frame in which the population will be expected to be recovered (e.g., after five years, the mitigation population will support at least as many individuals as were impacted). In addition, the success criteria will be tied to a nearby reference population to control for regional and temporal variation that will take into account events such as drought and climate fluctuations. Specific criteria will be defined in the HMMP rather than in this DEIR. Nevertheless, the performance/success criteria described in the HMMP will guide mitigation to manage and protect high-quality habitat for, and populations of, the impacted species; and
- a description of the management plan's adaptive component, including potential contingency measures for mitigation elements that do not meet performance criteria.

<u>Mitigation Measure BIO-2: Establish Tree Protection Zones for Ground-disturbing Activities</u> <u>Near Butano Ridge Cypress</u> If ground-disturbing activities are proposed and unavoidable within 50 feet of an individual of Butano Ridge cypress to be avoided, a tree protection zone (TPZ) will be established to protect those populations. In order to minimize the impacts on Butano Ridge cypress at a maintenance work area, the County will implement the following tree protection measure:

 Butano Ridge cypress trees that are within 50 feet of proposed program activities will be clearly marked for avoidance. Fenced enclosures for individual trees or groups of trees to be protected will be erected at the driplines of trees, where possible, or as established by the County biologist or another qualified biologist. Soil disturbance within this protection zone will not be permitted.

<u>Mitigation Measure BIO-3: Monitor Temporary Impact from Vegetation Management Activities</u> <u>on "Disturbance-Tolerant" Special-Status Plant Species</u>

If vegetation management activities that could provide a long-term benefit to special-status plant species (e.g., grazing for thatch removal, invasive plant species removal, shrub and tree removal for fuel reduction, etc.) are proposed and impacts on special-status plant species are unavoidable and greater than a certain threshold (i.e., 10% for CRPR List 1 and 2 species and 20% for CRPR List 3 and 4 species [see Impact BIO-1C above]), the following measures will be implemented.

- If the vegetation management activity is likely to result in any amount of ground disturbance, then prior to implementation of the maintenance activity, the County will salvage plant material prior to disturbance. This could include removing and retaining the topsoil prior to the implementation of maintenance activities to salvage the seed bank and/or propagules, such as bulbs, corms, etc.
- Success criteria will be developed to evaluate the progress of the population following the maintenance activity. As with the development of the HMMP described under Mitigation Measure BIO-1 the specific performance/success criteria for this monitoring will depend on information regarding the specific site, its conditions, the biological resources present on the site, and the specific plant species. The success criteria will be tied to number of individuals or area of occupied habitat that is directly impacted, and final success criteria will be clearly state a timeframe in which the population will be expected to be recovered (e.g. after five years, the population will still support at least as many individuals as were impacted). In addition, the success criteria will be tied to a nearby reference population to control for regional and temporal variation that would take into account events such as drought and climate fluctuations.
- The population must show evidence that it is recovering in the initial year following the maintenance activity. This requirement will be modified accordingly if the reference population is also in decline indicating that regionally the species is in decline for a reason other than the maintenance activity (e.g., drought).
- If plants are not observed to be recovering from the maintenance activity and the reference population is not in decline, then the County will work with a qualified botanist to develop a restoration plan for the impacted population, either using the salvaged plant material or plant material from the same watershed. The restoration plan will generally follow the format of the HMMP described in Mitigation Measure

BIO-1, describing the measures that will be taken to enhance and manage the mitigation population and to monitor the development of the population towards specific success criteria. The County will monitor the impacted population for three years. By year three, the population needs to show an increasing trend toward improvement. If the population is not showing improvement, then the County will provide compensatory mitigation for the loss of that portion of the population as described in Mitigation Measure BIO-1.

<u>Mitigation Measure BIO-4: Provide Compensatory Mitigation for the California Red-Legged Frog</u> and California Tiger Salamander

The County will compensate for the long-term loss of habitat for the California red-legged frog and/or California tiger salamander via the restoration, enhancement, and/or management of suitable habitat on County lands (either existing lands or lands that are acquired); financial contribution to local County based watershed, stewardship, or non-profit organizations that lead or coordinate habitat restoration or watershed improvement projects; or purchase of credits in a USFWS-approved conservation bank. Compensatory mitigation for permanent loss of breeding habitat will be provided at a ratio of up to 3:1 (mitigation:impact). Compensatory mitigation for long-term loss of upland dispersal or refugial habitat will be provided at a ratio of up to 2:1 (mitigation:impact), on an acreage basis. The required mitigation ratio will be negotiated annually with the USFWS (and CDFW for impacts on the California tiger salamander) based on the types and quality of habitat impacted during each year's maintenance activities.

For any mitigation efforts, the County will ensure adequate monitoring to document that the mitigation is operational and successfully providing the functions and values needed to offset potential program impacts. The County will prepare an HMMP describing the measures that will be taken to manage the property and to monitor the effects of management on the California red-legged frog and California tiger salamander; the HMMP will include, at a minimum, the following:

- a summary of impacts on red-legged frog and/or tiger salamander habitat and populations, and the proposed mitigation;
- a description of the location and boundaries of the mitigation site and description of existing site conditions;
- a description of measures to be undertaken, if necessary, to enhance (e.g., through focused management) the mitigation site for red-legged frogs and/or tiger salamander;
- proposed management activities, such as managed grazing, management of invasive plants, measures targeted at sustaining populations of burrowing mammals, or other measures to maintain high-quality habitat for red-legged frogs and/or tiger salamanders;
- a description of species monitoring measures on the mitigation site, including specific, objective goals and objectives, performance indicators, success criteria, monitoring methods, data analysis, reporting requirements, and monitoring schedule. Determining specific performance/success criteria requires information

regarding the specific mitigation site, its conditions, and the specific enhancement and management measures tailored to the mitigation site and its conditions.

- a description of the management plan's adaptive component, including potential contingency measures for mitigation elements that do not meet performance criteria; and
- a description of the funding mechanism for the long-term maintenance and monitoring of the mitigation lands.

Mitigation Measure BIO-5: Provide Compensatory Mitigation for the San Francisco Garter Snake

The County will compensate for the long-term loss of habitat for the San Francisco garter snake via the restoration, enhancement, and/or management of suitable habitat on County lands (either existing lands or lands that are acquired); financial contribution to local County based watershed, stewardship, or non-profit organizations that lead or coordinate habitat restoration or watershed improvement projects; or purchase of credits in a USFWS-approved conservation bank. Compensatory mitigation for permanent loss of breeding habitat will be provided at a ratio of up to 3:1 (mitigation:impact), and compensatory mitigation for long-term loss of upland dispersal or refugial habitat will be provided at a ratio of up to 2:1 (mitigation:impact), on an acreage basis. The required mitigation ratio will be negotiated annually with the USFWS and CDFW, based on the types and quality of habitat impacted during each year's maintenance activities.

For any mitigation efforts, the County will ensure adequate monitoring to document that the mitigation is operational and successfully providing the functions and valued needed to offset potential Maintenance Program impacts. The County will develop an HMMP, which will include components similar to those described for the California red-legged frog and California tiger salamander in Mitigation Measure BIO-4.

For County-led on-site and off-site mitigation projects, the County will be responsible to monitor such projects for a period of 3 to 5 years depending upon the type of mitigation project. For watershed partnering mitigation projects in which the County serves as a partner funding the mitigation through an agency such as the RCD, it is anticipated that the local partner (RCD) will monitor and provide reporting on the site for a period of 3 to 5 years. While it is the watershed partner's responsibility to monitor site conditions, it will be the County's responsibility to communicate monitoring results annually as part of the County Maintenance Program's reporting process.

After mitigation has been provided for impacts on a specific area supporting the San Francisco garter snake from a specific year's activities, future (i.e., repetitive) impacts on that area will not require additional mitigation.

Mitigation Measure BIO-6: Pre-Activity Survey and Avoidance

Prior to ground-disturbing program activities in high-quality burrowing owl habitat (i.e., extensive grasslands with abundant ground squirrel burrows, and possibly other habitats such as ruderal habitat or open scrub if determined by a qualified biologist to provide suitable burrowing owl roosting habitat), a focused pre-activity survey will be conducted for burrows occupied by migrant or overwintering burrowing owls. Surveys will be conducted by a qualified

biologist (i.e., one who is familiar with burrowing owl ecology and experienced in performing surveys for them) no more than 14 days prior to commencement of ground-disturbing activities. These surveys will be conducted in accordance with the CDFW's 2012 Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012) or any more current equivalent should new guidelines be released before the activity is initiated. Although burrowing owls are not expected to breed in the program area, pre-activity surveys will be conducted year-round due to the potential for dispersing juveniles or failed breeders from South Bay breeding populations (in addition to migrants and wintering birds present during the nonbreeding season) to occupy burrows in the program area during breeding season.

During the initial site visit, which will be conducted no more than 14 days prior to the start of construction, a qualified biologist will survey the activity area and (to the extent that access allows) habitat within 250 feet of the site for burrowing owls and suitable burrowing owl habitat (i.e., ground squirrel burrows). If no burrows suitable for use by burrowing owls are present, no additional surveys will be required. However, if suitable burrows are determined to be present, the qualified biologist will visit the site one additional time to investigate each burrow for signs of owl use and to determine whether owls are present in areas where they could be affected by the proposed activities. This site visit will take place no more than 24 hours prior to the start of ground disturbing activities.

If an occupied burrow(s) is found, impacts on the burrow will be avoided by the implementation of a construction-free buffer around the occupied burrow. The size of the buffer will be determined by the qualified biologist but will be sufficient to ensure the occupied burrow is not damaged. No ground-disturbing program activities will commence within the buffer area until a qualified biologist confirms that the burrow is no longer occupied.

If impacts on occupied burrows are unavoidable, passive relocation techniques will be used to evict owls from burrows within the work area prior to initiation of ground-disturbing activities. No owls will be evicted during the breeding season (February 1 through August 31) unless a biologist can determine that owls are not actively nesting.

Mitigation Measure BIO-7: Provide Alternative Bat Roost Habitat

If a tree containing a pallid or Townsend's big-eared bat maternity roost, or a large nonmaternity roost (i.e., \geq 10 individuals), is to be removed by proposed program activities, a qualified bat biologist will design and determine an appropriate location for an alternative roost structure. If a tree containing a pallid or Townsend's big-eared bat maternity roost or large non-maternity roost is not removed, but program-related disturbance causes the abandonment of the roost site (even during the non-breeding season), then the County will either monitor the roost site to determine whether the affected species returns to the roost, or construct an alternative roost. If the County elects to monitor the roost and bats do not return within one year, an alternative roost will be constructed.

A qualified bat biologist will determine the appropriate location for the alternative roost structure, based on the location of the original roost and habitat conditions in the vicinity, and oversee installation of a new roost structure. The roost structure either will be built to specifications determined by a qualified bat biologist or will be purchased from an appropriate vendor (though a qualified bat biologist should approve the type of structure purchased). The structure will be placed as close to the affected roost site as feasible. The County will monitor the roost for up to three years (or until occupancy is determined, whichever occurs first) to

determine use by bats. If, by Year 3, pallid bats or Townsend's big-eared bats are not using the structure, a qualified bat biologist, in consultation with CDFW, will identify alternative roost designs or locations for placement of the roost, place the new roost at the agreed-upon location, and monitor the new roost for an additional three years (or until occupancy has been verified).

Impact BIO-2: Potential Adverse Effects on Riparian Habitat or Other Sensitive Natural Communities Identified in Local or Regional Plans, Policies, Regulations or by California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), or National Marine Fisheries Service (NMFS)

Finding:

Statewide, riparian communities are particularly threatened by project activities given their limited distribution and sensitivity to disturbance. Other sensitive natural communities that would have potential to be impacted by proposed program activities include coastal freshwater marsh (freshwater emergent wetlands and wet meadows) and northern coastal salt marsh (saline emergent wetlands and bay margins [tidal mudflats]).

Bank stabilization, sediment removal, and vegetation management activities have the potential to result in the loss and disturbance of woody riparian vegetation in those cases where Program activities would take place in riparian corridors (along stream banks). These activities could result in the loss of vegetation through direct removal, herbicide use, trampling, and other impacts. Maintenance activities could also impact native riparian vegetation through the introduction and spread of pathogens such as Phytophthora.

The effects of bank stabilization, sediment removal, and vegetation management activities on riparian vegetation have not been quantified, as the precise amount of stream bank to be stabilized, sediment to be removed, or extent of vegetation management by program activities cannot be quantified at this time. Such impacts will be determined prior to implementation of the maintenance activity and reported in the annual work plan and resource agency notification.

Additionally, woody riparian habitats in the program area provide a wide range of biological functions for fish and wildlife, ranging from providing habitat for fish and other aquatic species to foraging and nesting habitat for birds, to movement corridors for numerous terrestrial species. As a result, impacts on riparian habitats would affect a variety of fish and wildlife species as well.

Implementation of BMPs BIO-24, GEN-1 through GEN-16, GEN-19, GEN-22, EC-1 through EC-14, and SC-1 through SC-6 would minimize disturbance of woody riparian vegetation. Nevertheless, the Program would result in temporal losses of woody riparian functions and values and some permanent losses of woody riparian habitat because complete avoidance could not be accomplished while still meeting the program goals for public health and safety directives. Thus, significant residual impacts would remain. The impact of Program activities on woody riparian vegetation is considered significant because it would result in short-term degradation of riparian habitat and temporary and permanent loss of riparian vegetation.

Implementation of Mitigation Measure BIO-8 will thus ensure that Program activities do not result in a substantial adverse effect on riparian habitat; this impact would be less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Mitigation Measure BIO-8: Provide Compensatory Mitigation for Woody Riparian Vegetation

The compensatory mitigation package, which is incorporated into the proposed Program, will be implemented to compensate for impacts on woody riparian vegetation.

By April 30 of each year, the County would notify the relevant regulatory agencies (i.e., those agencies with jurisdictional authority or oversight) of the year's planned maintenance projects. The relevant regulatory agencies would be provided with information describing proposed maintenance project activities, locations, natural resource conditions, and any other key resource issues. The notification package would describe which ground-disturbing maintenance activities would result in temporary and permanent impacts on riparian habitat. It would also describe in detail the County's proposal for providing compensatory mitigation for those impacts and may include one or more options described in Chapter 2, Section 2.7.3 and summarized below.

For regular maintenance activities that have potential to remove some riparian habitat, the preferred mitigation approach is on-site mitigation. The general on-site mitigation approach is to restore the type of habitat that is impacted by maintenance activities in the same project vicinity or stream reach where the disturbance has occurred. For example, for creek bank stabilization projects, the County would seek to implement biotechnical solutions, as conditions allow, to avoid or minimize the potential hardening of creek banks. For many program activities, this will occur as part of implementing one of the biotechnical Erosion Control BMPs (e.g., BMPs EC-1 through EC-14). For example, implementing EC-1: Brush Layering, EC-2: Brush Packing, EC-3: Live Staking, or EC-4: Live Pole Drain, would involve using willow stakes (and other woody native material that can re-sprout) as a biotechnical repair technique would result in the re-establishment of woody riparian habitat in-place following maintenance activities.

For on-site, in-kind mitigation, the County will restore, preserve, and manage riparian habitats, or substantially improve the quality of highly degraded riparian habitats at a ratio of 1.5:1, meaning 1.5 acres of riparian habitat will be restored/created for every 1 acre of riparian habitat impacted by proposed program activities.

Where on-site mitigation is not possible, off-site mitigation can provide opportunities for inkind mitigation that aligns with the functions and values of natural resources that are potentially impacted by the proposed program but is done at a different location than where the maintenance occurs. The general approach is to conduct off-site mitigation within the same watershed or general region as where the maintenance activities occur. This type of mitigation is similar to the on-site option in that the focus is to provide in-kind habitat enhancement or restoration, stream functional improvement, water quality benefits, or overall watershed health improvements that offset maintenance impacts or reduce the need for maintenance. Several offsite mitigation options are identified in the Maintenance Manual (Appendix A), including future restoration efforts at the San Vicente Creek Enhancement Project, future projects within Pescadero Creek Park, invasive plant and tree removal on Park lands, gully repair and large woody debris implementation projects in the Pescadero-Butano Creek watershed, invasive plant removal at Quarry Park in Half Moon Bay, creek restoration in Junipero Serra County Park, and removal of concrete from El Zanjon Creek. For off-site, in-kind mitigation for riparian habitat, the County will acquire, preserve, enhance, and manage lands that provide similar ecological functions and values to the riparian impacted by program maintenance activities. The acquisition and preservation/enhancement of these higher quality lands will occur at a ratio of 3:1, meaning 3 acres of riparian shall be acquired, preserved, and enhanced for every 1 acre of riparian habitat impacted by proposed Program activities. Enhancement may include modification of existing management, limited planting, or invasive plant removal, or other activities to enhance riparian/aquatic habitat functions and values.

Other options for compensatory mitigation include establishing conservation easements or deed restrictions, partnering with local San Mateo County based watershed, stewardship, or non-profit organizations that lead or coordinate habitat restoration or watershed improvement projects.

Impact BIO-3: Potential Adverse Effects on Federally Protected Wetlands as defined by Section 404 of the Clean Water Act

Finding:

Two wetland types, coastal freshwater marsh (freshwater emergent wetlands and wet meadows) and northern coastal salt marsh (saline emergent wetlands and bay margins [tidal mudflats]), are found in the program area and are considered sensitive habitats.

In general, proposed program activities and subsequent changes in hydrology may result in changes to the extent of wetland and aquatic communities present in a work site. Wetland vegetation may be lost as a result of mechanical or physical clearing in the work site (including access areas) and damage to vegetation may occur. The loss of wetland vegetation and non-instream vegetation along stream banks following bank stabilization activities may result in an increase in erosion and sedimentation. Increased erosion and sedimentation may lead to the filling in of pools and damage to wetland vegetation. Bank stabilization also may affect downstream areas by altering flow patterns.

Similar to bank stabilization, maintenance of some culverts, storm drainage facilities, channels, bridges, roadside ditches, and GI repair and maintenance activities would require temporary water diversions or dewatering. These activities would result in the temporary loss of aquatic and wetland communities and may result in increased turbidity within and downstream from the footprint of the activities caused by mobilization of fine sediments.

Road maintenance (e.g., re-grading unpaved roads, repair of rolling dips, relocating road surface materials that have moved due to erosion, re-establishing turn around areas for emergency vehicles, and repairing slip-outs/slides) and trail maintenance (e.g., repairing water bars, rolling dips, and drainage ditches to prevent or reduce erosion and downstream sedimentation issues in nearby channels and creeks) activities may result in changes to the extent of wetland and aquatic communities present in a work site if a wetland is present directly adjacent to required road or trail repair. As with the impacts from bank stabilization activities described above, wetland vegetation may be lost as a result of mechanical or physical clearing in the work site (including access areas) and damage to vegetation may occur.

Implementation of the following BMPs during maintenance activities would reduce impacts on wetlands: GEN-1 through GEN-16, GEN-19, GEN-22, EC-1 through EC-14, and SC-1 through SC-6. The vast majority of impacts to acreage of wetlands and other waters would be short-term,

because aquatic habitats would be maintained despite proposed Program activities (e.g., no loss of aquatic habitat would occur because of any maintenance activity other than, perhaps, bank stabilization). In addition, many vegetated wetland areas would restore themselves within 1 to 2 years following sediment removal or vegetation management. Nevertheless, proposed program activities would result in temporal losses of wetland and aquatic habitat functions and values, possible type conversion of wetlands (e.g., from wetlands dominated by certain plant species to wetlands dominated by others), and potentially permanent losses of wetlands and other waters, which would be a potentially significant impact.

Marina maintenance activities would likely take place in aquatic habitats or adjacent tidal wetland habitat (e.g., launch ramp repairs, dock maintenance) and sediment removal in culverts and ditches around the marina. The impacts would be similar to those described above for other maintenance activities and are expected to be temporary and short in duration.

Implementation of Mitigation Measure BIO-9 would thus ensure that program activities do not result in a substantial adverse effect on federally protected wetlands or on sensitive wetland and aquatic communities, reducing residual impacts on wetlands and other waters to a level that is less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

The potentially significant effects listed above can be reduced to a less-than-significant level by incorporating the following mitigation measure identified in the EIR:

<u>Mitigation Measure BIO-9: Provide Compensatory Mitigation for Impacts on Wetlands and</u> <u>other Waters</u>

By April 30 of each year, the County would notify the relevant regulatory agencies (i.e., those agencies with jurisdictional authority or oversight) of the year's planned maintenance projects. The relevant regulatory agencies would be provided with information describing proposed maintenance project activities, locations, natural resource conditions, and any other key resource issues. The notification package would describe which ground-disturbing maintenance activities would result in impacts on temporary and permanent impacts on wetlands or waters of the U.S. and state. Wetlands that are considered waters of the U.S./state will be identified on the basis of presence of all three parameters for jurisdictional wetlands – hydrophytic vegetation, wetland hydrology, and hydric soils. In the Coastal Zone, features will be delineated as wetlands under the Coastal Act if they possess any one of those three parameters. The notification package would also describe in detail the County's proposal for providing compensatory mitigation for those impacts and may include one or more options described in Chapter 2, Section 2.7.3 of the DEIR and summarized below.

For routine maintenance activities located outside of tidal wetland/other waters habitat within the USACE jurisdiction, the preferred mitigation approach is on-site mitigation. The general onsite mitigation approach is to restore the type of habitat that is impacted by maintenance activities in the same project vicinity or stream reach where the disturbance has occurred. For example, for creek bank stabilization projects, the County would seek to implement biotechnical solutions, as conditions allow, to avoid or minimize the potential hardening of creek banks. For on-site, in-kind mitigation, the County will restore, preserve, and manage wetlands and aquatic habitats, or substantially improve the quality of highly degraded wetlands and aquatic habitats at a ratio of 1.5:1, meaning 1.5 acres of wetlands or other waters shall be restored/created for every 1 acre of wetlands and other waters permanently impacted by program activities.

Where on-site mitigation is not possible, off-site mitigation can provide opportunities for inkind mitigation that aligns with the functions and values of natural resources that are potentially impacted by the program but is done at a different location than where the maintenance occurs. The general approach is to conduct off-site mitigation within the same watershed or general region as where the maintenance activities occur. This type of mitigation is similar to the on-site option in that the focus is to provide in-kind habitat enhancement or restoration, stream functional improvement, water quality benefits, or overall watershed health improvements that offset maintenance impacts or reduce the need for maintenance. Several offsite mitigation options are identified in the Maintenance Manual (Appendix A), including future restoration efforts at the San Vicente Creek Enhancement Project, future projects within Pescadero Creek Park, invasive plant and tree removal on Park lands, gully repair and large woody debris implementation projects in the Pescadero-Butano Creek watershed, invasive plant removal at Quarry Park in Half Moon Bay, creek restoration in Junipero Serra County Park, and removal of concrete from El Zanjon Creek.

For off-site, in-kind mitigation, the County will acquire, preserve, enhance, and manage lands that provide similar ecological functions and values to the wetlands and other waters impacted by Program maintenance activities. The acquisition and preservation/enhancement of these higher quality lands will occur at a ratio of 3:1, meaning 3 acres of wetlands or other waters shall be acquired, preserved, and enhanced for every 1 acre of wetlands and other waters impacted by Program activities. Enhancement may include modification of existing management, limited planting, or invasive plant removal, or other activities to enhance wetland/aquatic habitat functions and values.

Other options for compensatory mitigation include establishing conservation easements or deed restrictions, partnering with local San Mateo County based watershed, stewardship, or non-profit organizations that lead or coordinate habitat restoration or watershed improvement projects, or the purchase of mitigation credits from a wetland mitigation bank. The mitigation ratio for purchase of mitigation credits will be determined through coordination with the owner of any bank that is approved in the future, as well as with the USACE and RWQCB.

Impact BIO-6: Be Located Inside or Within 200 Feet of a Marine or Wildlife Reserve

Finding:

The proposed program includes maintenance activities that would occur within the Fitzgerald Marine Reserve (Reserve), which is considered a sensitive habitat under the San Mateo County General Plan and designated as an Area of Special Biological Significance by the State Water Resources Control Board. The program area is also within 200 feet of the following Marine Protected Areas: Egg (Devil's Slide) Rock to Devil's Slide Special Closure, Montara State Marine Reserve (SMR), Pillar Point State Marine Conservation Area, Año Nuevo SMR, Redwood Shores State Marine Park (SMP), and Bair Island SMP. Maintenance activities could result in the degradation of conditions within the reserves, including adverse effects due to increases in erosion, leaks of petrochemicals, hydraulic fluids, and solvents, spread of invasive plant species,

and temporary or permanent loss of wetlands or other sensitive habitats, as stated above in Impacts BIO-2 and BIO-3.

Implementation of the following BMPs would avoid or minimize impacts on marine and wildlife reserves: GEN-1, GEN-2, GEN-3, GEN-5 through GEN-16, GEN-19, GEN-22, EC-1 through EC-14, and SC-1 through SC-6. Nevertheless, residual impacts may remain because avoidance and permanent loss on sensitive habitats (e.g., wetlands) may not be feasible.

Implementation of Mitigation Measures BIO-8 and BIO-9 would reduce the impact on marine and wildlife reserves to a less-than-significant level by compensating for residual impacts on riparian and wetland habitats. This impact would be less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

Incorporating Mitigation Measures BIO-8 and BIO-9, identified above and in the EIR, will reduce these potentially significant effects to less-than significant levels.

HAZARDS AND HAZARDOUS MATERIALS

Impact HAZ-1: Create a Significant Hazard to the Public or the Environment from the Routine Transport, Use, or Disposal of Hazardous Materials

Finding:

The proposed program would involve the routine transport, use, and disposal of hazardous materials, such as pesticides, herbicides, fuel, oil, solvents, and related materials. For example, for vegetation management activities, the County may need to transport herbicides to the project site, use herbicides to control nuisance vegetation, and then dispose of herbicide containers or applicator equipment after completing the job. In addition, the County would use heavy construction equipment that would require fuel, oil, lubricants, and other potentially hazardous materials. It is also possible that proposed program activities could encounter contaminated soil or water, which would require transport and disposal. Such routine transport, use, and disposal of hazardous materials could potentially create a hazard to the public or the environment.

If proposed program activities involving ground disturbance were to encounter contaminated soil, sediment, or groundwater, this could potentially expose workers, the public, or the environment to hazards if adequate precautions are not taken.

Implementation of BMPs GEN-6, 7, 9, 10, and BMP ST-1 (Testing and Disposal of Sediment) would reduce impacts associated with the majority of hazardous materials transport, use, and disposal that would occur under the proposed program to less than significant. Although less frequent, encounters with contaminated soil, sediment, or groundwater would remain potentially significant.

Implementation of Mitigation Measure HAZ-1 would reduce this impact to less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

The potentially significant effects listed above can be reduced to a less-than-significant level by incorporating the following mitigation measure identified in the EIR:

<u>Mitigation Measure HAZ-1: Proper Handling and Disposal of Contaminated Soil, Sediment, and</u> <u>Groundwater</u>

Prior to initiating ground-disturbing activities, the County or its contractors will inspect the soil, sediment, or groundwater for the presence of possible contamination. If indicators of contamination (e.g., foul odor, staining or sheen, etc.) are found, the County or its contractors will then test the soil. If the lab results confirm contamination is present, the soil, sediment, or groundwater will be treated as hazardous and dispose of the material at an approved hazardous waste disposal facility. In removing potentially contaminated soil, sediment, or groundwater, workers will wear protective clothing and equipment to limit their exposure.

Impact HAZ-4: Result in a Significant Hazard to the Public or the Environment from Location on a Known Hazardous Materials Site

Finding:

In general, proposed program activities would be unlikely to occur on documented hazardous materials sites that are listed pursuant to California Government Code Section 65962.5. Routine maintenance activities would typically occur within existing County parks, along County maintained roads and channels, and at closed landfills (e.g., the Pescadero Landfill and Half Moon Bay Landfill) and County-owned airports (e.g., Half Moon Bay Airport and San Carlos Airport). Of the known maintenance sites identified, only one site (Pescadero County Park) was located on a documented hazardous materials site (i.e., leaking underground storage tank cleanup site).

It is possible that a future maintenance activity involving ground disturbance may be required on a site that is listed as an open or active clean-up site in GeoTracker or EnviroStor databases. In such an instance, maintenance workers could be subjected to potential hazards from contaminated soil that may be present on the site.

Implementation of BMP ST-1 (Testing and Disposal of Sediment) would help minimizes the risk of encountering hazardous materials during sediment removal work by requiring proper testing to determine the suitability for potential reuse and appropriate disposal of sediment if hazardous levels of contaminants are encountered. However, this BMP is not mandatory for all sediment removal activities and other proposed maintenance activities have potential to expose maintenance workers to contaminated soil, a potentially significant impact.

Implementation of Mitigation Measure HAZ-2 would reduce this impact to less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

The potentially significant effects listed above can be reduced to a less-than-significant level by incorporating the following mitigation measure identified in the EIR:

<u>Mitigation Measure HAZ-2: Review of Proximity to Existing Known Hazardous Materials Clean-up Sites and Implementation of Safety Precautions</u>

The County and/or its contractors will evaluate the proximity of proposed maintenance sites that involve ground-disturbing activities to existing known hazardous material clean-up sites. This review will include examination of the planned maintenance activity footprint in relation to records of hazardous materials sites in the State Water Resources Control Board's GeoTracker database and the Department of Toxic Substances Control's EnviroStor database.

If the proposed maintenance activity is located on or within 100 feet of a documented hazardous material contamination site, for which clean-up activities have not been completed or been successful, the County and/or its contractors will commission a Phase I Environmental Site Assessment to more fully characterize the past land uses and potential for soil and/or groundwater contamination to occur at or in close proximity to the site.

If the Phase I Environmental Site Assessment demonstrates a reasonable likelihood that contamination remains within the proposed maintenance activity's area of disturbance, the County and/or its contractors will commission a Phase II Environmental Site Assessment, including soils testing, to characterize the extent of the contamination and develop ways to avoid the contaminated areas during maintenance activities. The County will follow all recommendations of the Phase II Environmental Site Assessment and conduct the proposed maintenance to avoid areas of contamination, to the extent feasible. In the event that it is not feasible to avoid all areas of contamination, the County and/or its contractors will follow all applicable laws regarding management of hazardous materials and wastes. This includes proper disposal of any contaminated soil in a hazardous waste landfill, and ensuring that workers are provided with adequate personal protective equipment to prevent unsafe exposure.

<u>NOISE</u>

Impact NOI-1: Substantial Temporary or Permanent Increase in Ambient Noise Levels in the Vicinity of Proposed Maintenance Areas in excess of Standards Established in the Local General Plan or Noise Ordinance, or in other applicable Local, State or Federal Standards

Finding:

The proposed program's maintenance activities would involve the use of construction equipment, hauling trucks, and employee vehicles that would result in temporary noises and ambient noise level increases. These increases may temporarily affect sensitive receptors in the vicinity. The estimated distance between the maintenance work site and the nearest sensitive receptors would need to be at least 397 feet to meet the single-family residential CNEL of 70 dBA and 40 feet to meet the FTA and certain cities' standards of 90 dBA. It is possible that maintenance activities and the use of hauling trucks or construction equipment may occur within these distances of residences and cause temporary ambient noise level exceedances.

Maintenance activities for the proposed program would generally be conducted during daytime hours (between 8:00 a.m. and 5:30 p.m.) on weekdays within the time windows permitted by

the various local jurisdictions. Since the maintenance activity timeframes and schedules for each individual maintenance activity have not yet been determined, proposed maintenance activities have potential to expose people (particularly residential receptors) to noise levels exceeding the above-listed timeframe and other standards in the local general plans and noise ordinances.

Implementation of BMP GEN-17 (Maintain Traffic Flow) would ensure that noise produced by hauling trucks for the maintenance activities is limited to the normal daytime working hours. However, impacts would remain potentially significant as temporary noise impacts from construction equipment would not be reduced or limited to certain hours of the day.

Implementation of Mitigation Measures NOI-1, NOI-2, and NOI-3 would reduce this impact to less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

The potentially significant effects listed above can be reduced to a less-than-significant level by incorporating the following mitigation measure identified in the EIR:

Mitigation Measure NOI-1: Employ Noise-Reducing Maintenance Practices

The following measures will be implemented by the County to reduce adverse effects from maintenance activity noise in locations where noise-sensitive receptors could be adversely affected:

- Locate stationary equipment as far as practical from noise-sensitive land uses;
- Use electrified or otherwise quieter equipment when practical;
- Use sound-control devices on equipment that are more effective than devices originally provided on the equipment;
- Use noise-reducing enclosures around noise-generating equipment; and
- Install temporary barriers between noise sources and noise-sensitive land uses, or take advantage of existing barrier features (e.g., terrain and structures) to block sound transmission.

When determining haul truck routes, consideration will be given to altering haul routes to avoid sensitive receptors when feasible.

Mitigation Measure NOI-2: Advance Notification of Nearby Sensitive Receptors

The County will notify sensitive receptors located within 400 feet of maintenance sites at least one week prior to performing maintenance work.

Mitigation Measure NOI-3: Limit Nighttime Construction Noise

When feasible, the County will ensure that no construction activities are conducted in close proximity (500 feet) to a residence outside the hours of 8:00 a.m.–5:30 p.m. on weekdays (or the applicable specific hours permitted by the local jurisdiction if extended outside of this time period) unless a special exemption permit allowed by the local jurisdiction is obtained.

Impact NOI-2: Generation of Excessive Groundborne Vibration or Groundborne Noise Levels

Finding:

Multiple maintenance activities would involve the use of bulldozers, rollers, and/or loaded trucks, which are substantial sources of equipment-related vibration. Given the uncertainty in the exact location of future maintenance activities, multiple sensitive receptors may be located within the calculated vibration perception and annoyance threshold distances.

Implementation of BMP GEN-17 would minimize vibration produced by hauling trucks. However, maintenance activities could still result in temporary vibration effects that exceed annoyance and perception thresholds. Therefore, vibration effects on sensitive receptors would be potentially significant.

Given the temporary nature of vibration resulting from maintenance activities and with implementation of Mitigation Measure NOI-4, this impact would be reduced to less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

The potentially significant effects listed above can be reduced to a less-than-significant level by incorporating the following mitigation measure identified in the EIR:

Mitigation Measure NOI-4: Implement Vibration Reduction Measures

The County will implement the following vibration-reducing measures during construction activities which could generate substantial vibration to minimize impacts on nearby sensitive receptors:

- Ensure proper tuning of vibration-causing equipment.
- Use vibration damping devices to the extent feasible.
- Limit use of vibratory equipment to the extent feasible and do not overlap use of vibratory equipment. Where possible, maintain a distance of 20+ feet from buildings.
- Use electric stationary equipment (e.g., generators) where feasible.
- Implement noise and/or vibration shields, such as sound aprons or temporary enclosures with sound-absorbing material, on or around construction equipment. For all maintenance activities involving the use of construction equipment or hauling trucks occurring within 75 feet of residences at any time of day, install a

temporary noise and vibration barrier between the project site and the nearest sensitive receptors. Following the completion of maintenance activities within that distance, the barrier will be removed.

Impact NOI-3:Be Located in the Vicinity of a Private Airstrip or an Airport Land Use Plan
Area, or, within 2 miles of a Public Airport, and Expose People Residing or
Working in the Project Site to Excessive Noise Levels

Finding:

Implementation of the proposed program's activities at airport sites or within 2 miles of airports would potentially expose the program's workers to temporary excessive noise levels from airport operations. Factors affecting the noise levels to which workers may be exposed from airport operations would include proximity of proposed maintenance sites to an airport, frequency or duration of plane takeoffs or landings, duration of maintenance activities, and noise reducing or shielding structures or terrain between the airport and the maintenance site.

There are multiple routine maintenance sites in the vicinity of airports in the program area and some activities such as vegetation management may take place at the two County-owned airports. Employees who perform maintenance activities at County airports have a greater potential to experience excessive noise levels. This impact would be significant.

Implementation of Mitigation Measure NOI-5 would reduce this impact to less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

The potentially significant effects listed above can be reduced to a less-than-significant level by incorporating the following mitigation measure identified in the EIR:

Mitigation Measure NOI-5: Employee Best Management Practices at Airports

The County will require that employees performing any maintenance activities within an airport are supplied with and wear personal protective equipment (i.e., noise-reducing headphones or earplugs) to protect against excessive noise levels. Further, to the extent feasible, maintenance activities would be performed during periods of time when the frequency of plane landings/takeoffs is minimal.

<u>CUMULATIVE</u>

Impact BIO-1: Cumulative Effects on Biological Resources

Finding:

Other projects and development in the program area and surrounding areas have the potential to impact biological resources. The population in the County is expected to continue to grow and it can be inferred that several factors associated with projected population growth may affect biological resources in the program area. Demand for residential, commercial, and industrial development, wastewater discharge; and recreation activities will increase.

Collectively, these demands will put pressure on the same special-status species described above, as well as riparian and wetland habitats.

Ground-disturbing construction activities associated with other projects in the County and other future development planned to support growth envisioned throughout the County could disturb or directly injure or kill special-status species, while new development on undeveloped land may result in permanent loss of habitat, all of which could be considered cumulatively significant impacts.

The proposed program includes individual maintenance project limits and annual limits, which thereby help limit the scale of impacts that could occur on biological resources. Nonetheless, as described above, the proposed program would involve maintenance activities in various locations that could impact special-status plants, wildlife, and fish, as well as riparian habitat and wetlands. If left unmitigated, these impacts would result in a considerable contribution to a cumulative impact.

Implementation of BMPs BIO-1 through BIO-16, other stormwater protection BMPs identified previously under Impacts BIO-1 through BIO-6, and Mitigation Measures BIO-1 through BIO-9 would mitigate the proposed program's contribution to cumulative effects on special-status species, riparian habitat, and wetlands. Therefore, this cumulative impact would be less than significant with mitigation.

As such, the County finds that changes or alterations have been incorporated into the project which avoid or substantially lessen the significant effect on the environment.

Supporting Evidence:

The potentially significant effects listed above can be reduced to a less-than-significant level by incorporating the following mitigation measure identified in the EIR: Mitigation Measures BIO-1 through BIO-9.

B. FINDINGS SUPPORTING REJECTION OF ALTERNATIVES

The final EIR discussed and evaluated a range of alternatives as required by CEQA Guidelines section 15126.6. In order to reject an alternative, the County must find:

Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the alternatives identified in the EIR.

Following are the findings supporting rejection of each of the alternatives.

<u>Alternative 1 – No Project Alternative</u>

CEQA requires analysis of the No Project Alternative. Under this alternative, the County would not implement a comprehensive Routine Maintenance Program to guide and direct maintenance activities for County roads, trails, parks, culverts, bridges, GI, and storm drainage facilities under the County's maintenance authority. Rather, similar to existing conditions, maintenance activities would be implemented on a project-by-project, as-needed basis.

Finding for rejection:

Specific social and economic considerations make infeasible the alternative identified in the program EIR. This alternative would not meet the County's basic project objectives such as repairing or stabilizing eroded streambanks and culvert failures in a timely manner, providing regulatory assurance to enable long-term permits with fewer delays, or developing mitigation approaches in a more strategic and integrative manner.

Supporting Evidence:

While the No Project Alternative would substantially reduce construction-related impacts (e.g., air pollutant emissions, noise, vehicle traffic, biological and cultural resources effects), it would not benefit from an assessment of annual maintenance needs and integrated approach that addresses the County's overall maintenance needs before issues become larger and more complicated. The County would need to apply for permits for many of the proposed program activities on an annual basis, which would likely result in delays. As a result of such delays, additional environmental impacts would likely occur such as increased flooding from not clearing sediment from culverts and greater erosion and/or water quality impacts due to not addressing bank failures and road slip-outs/slides in a timely fashion. For the reasons described above, the No Project Alternative is considered infeasible.

Alternative 2: Reduced Maintenance Alternative

The Reduced Maintenance Alternative is similar to the proposed program but would reduce the number of culvert replacement projects, bank stabilization/slip-out repairs, bridge maintenance, and sediment removal projects. Some activities would be conducted at a similar level as baseline conditions including vegetation management, paved road maintenance activities, roadside ditch/swale activities, and unpaved road/trail maintenance work. However, fewer culvert replacement, bank stabilization/slip-out repairs, bridge maintenance, and sediment removal projects would occur under this alternative.

Finding for rejection:

Specific social and economic considerations make infeasible the alternative identified in the program EIR. By limiting the number of maintenance projects that occur in a given year, this alternative would only partially meet program objectives such as maintaining the functional integrity and operational quality and capacity of County facilities, preventing roadway flooding and reducing safety hazards, repairing eroded streambanks and failing culverts in a timely manner to prevent larger-scale slope failures. This alternative would also only partially meet the objective focused on providing regulatory assurance to enable long-term permits with fewer delays.

Supporting Evidence:

While this alternative would reduce construction-related impacts associated with the proposed program including traffic delays, air emissions from operating construction equipment and haul truck trips, construction noise, and biological resources impacts, it could result in a greater need for other maintenance projects that get deferred. Environmental conditions at sites requiring bank stabilization/slip-out repair, culvert repair/replacement, sediment removal, or bridge maintenance that get deferred to a later time may worsen over time and become larger projects, potentially resulting in increased environmental impacts relative to the proposed program. Additionally, deferring such maintenance projects could result in the need for emergency projects that tend to be addressed without adequate planning and occur during the wrong time of year (e.g., rainy season) when there is a greater likelihood for more severe construction impacts to occur on sensitive habitat, species, and/or water quality. Similarly, this alternative could result in greater flooding risks, erosion, and subsequent water quality impacts

by deferring certain maintenance activities (e.g., sediment and debris clearing at culverts and channels, road slip-outs and/or streambank failures). Over time, deferring road slip-outs along County roads may result in more hazardous road conditions for motorists and could also impede emergency vehicle access. Therefore, for these reasons, the Reduced Maintenance Alternative is considered infeasible.

Alternative 3: No Herbicide Use Alternative

The No Herbicide Use Alternative is similar to the proposed program except that no herbicides would be used for vegetation management. Although herbicides are used in limited locations to control invasive plants on County-owned parcels, other vegetation management methods including hand removal, grazing, and mechanized equipment would be used instead of herbicides.

Finding for rejection:

Specific economic considerations make infeasible the alternative identified in the program EIR. By avoiding herbicide use, this alternative would avoid and minimize potential adverse effects on water quality but it may result in a greater need for other vegetation removal techniques such as hand removal and mechanized removal, which may be more time-intensive and costly to the County.

Supporting Evidence:

While this alternative would avoid potential water quality effects due to accidental spills of chemicals and other risks associated with herbicide use, certain types of vegetation may be even more difficult to control without herbicides, resulting in persistent degraded habitat conditions. Because hand removal and mechanized vegetation removal techniques may not be as effective as herbicides, this alternative may require the County to remove certain invasive plants on a more frequent basis, resulting in greater number of truck trips and pollutant emissions due to higher use of mechanized equipment. For these reasons, the No Herbicide Use Alternative is considered infeasible.

Alternative 4: No Tier 3 Maintenance Activities Alternative

Under the No Tier 3 Maintenance Activities Alternative, only maintenance activities with a Tier 1 (No Impact) and tier 2 (Low Impact) designation, as described in Chapter 2, *Project Description*, of the DEIR, would be conducted. Tier 3 (Moderate/High Impact) maintenance activities would not be conducted under this alternative. This alternative would thereby require less compensatory mitigation for effects on sensitive species and/or sensitive habitat. However, the need for conducting Tier 3 maintenance activities would remain; such activities would need to be permitted by the County through a separate process.

Finding for rejection:

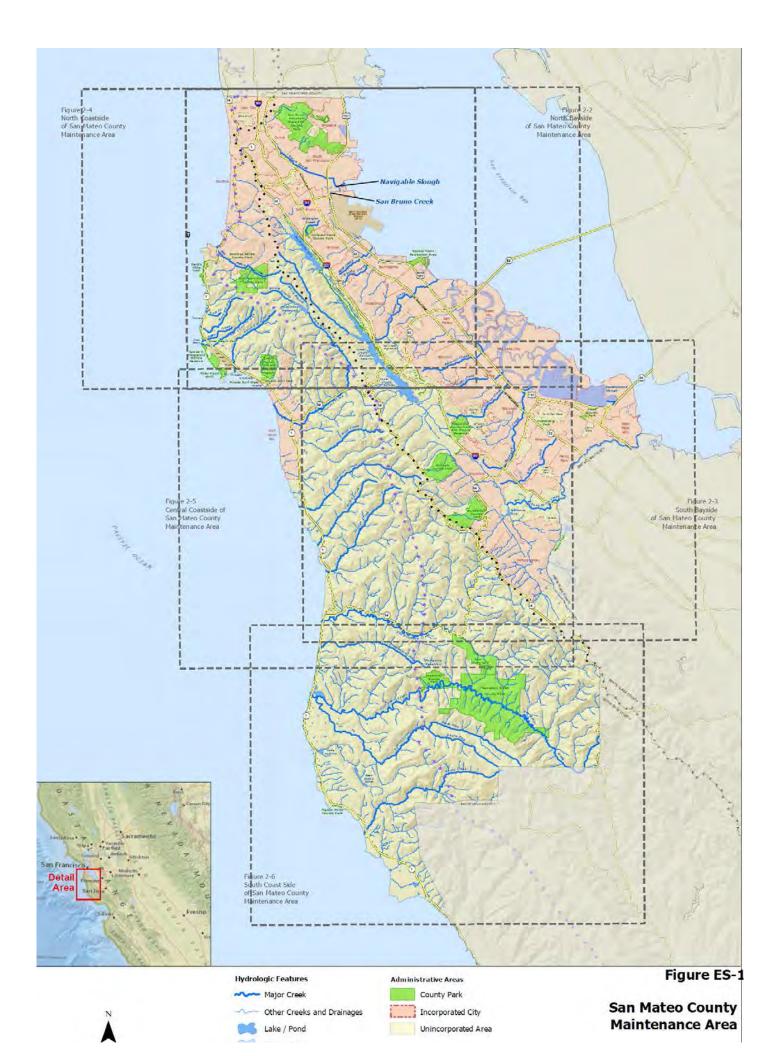
Specific social and economic considerations make infeasible the alternative identified in the program EIR. Like Alternative 2, this alternative would only partially meet program objectives pertaining to adequate maintenance of County channels, roads, and trails; preventing roadway flooding and reducing safety hazards; and repairing eroding streambanks and failing culverts in a timely manner. The County would still need to pursue separate permits for Tier 3 activities outside the Maintenance Program in order to conduct those activities, which would require additional time and resources on the County's part.

Supporting Evidence:

While this alternative would result in substantially less severe impacts on biological resources, air quality, traffic, and noise compared to the proposed program; eliminating Tier 3 activities

would not fully meet program objectives. Specifically, this alternative would not fully meet program objectives pertaining to adequate maintenance of County channels, roads, and trails; preventing roadway flooding and reducing safety hazards; and repairing eroding streambanks and failing culverts in a timely manner. Permitting Tier 3 activities on a separate track could require more time and resources on the County's part and result in permitting delays. Subsequently, environmental conditions at certain Tier 3 sites may worsen and could result in a greater need for maintenance, result in larger projects. and increased environmental impacts in the future. For the reasons described above, the No Tier 3 Maintenance Activities Alternative is considered infeasible.





Facility or Feature	Maintenance Activity
On-channel crossings	-Culvert repair or replacement -Sediment and debris removal
Bridges	 -Erosion protection at bridge abutments -Apply protective paint coating -Seal/repair cracks on bridge deck and concrete surfaces
Roadside ditch relief culverts	-Culvert repair or replacement -Sediment and debris removal
Flood control channels, drainages and creeks (engineered and nonengineered)	 -Sediment and debris removal -Bank stabilization -Downed tree management -Vegetation management -Tide gate maintenance and repair -Spalled or cracked concrete repair -Repair of existing rock slope protection (RSP) along creek banks -Floodwall maintenance (graffiti removal, localized vegetation management, and other minor repairs) -Levee maintenance (repair damage from animals, in-kind repair of existing RSP, crack repair, repair slip-outs along levee face)
Roadside ditches and swales	-Ditch or swale resurfacing -Sediment and debris removal -Vegetation management
Roads	 -Repaving and repair of damaged paved roads -Street sweeping on paved roads -Slip-out and slide repairs (including removal of slide material) -Mowing, trimming, and pruning vegetation along County roads
Trails, campgrounds, picnic areas, and other County Parks features	 -Trail tread repair and re-grading -Mowing, trimming, and pruning vegetation along trails -Non-native vegetation removal (e.g. herbicide, grazing, mechanical) -Fire fuel management
Green Infrastructure (GI)	-Vegetation and thatch removal -Light sediment and debris clearing and planting
Marina facilities including docks, sewer lines/tanks, water lines, launch ramp, and seawall revetment	 -Repair/replace damaged dock boxes and concrete -Periodic sewer line/ejector tank cleaning -Water line inspections -Replace damaged floats, cleats and bumper striping -Debris removal from launch ramp -Seawall revetment repair and riprap replacement
Storm drain facilities (storm drain pipes, manholes, catch basins, trash capture devices, flap gates, pump stations, diversion structures)	 -Trash and debris clearing -Flushing and cleaning -Repair and replacement of storm drain pipes, pumps, wet wells, and flap gates -Pump station building and diversion structure maintenance



Potenti	ial Impact	Level of Significance before Mitigation ¹	Mitigation Measures	Level of Significance after Mitigation ¹		
3.2 Aesthetics						
AES-1:	Adverse Effects on Scenic Vistas, Views from Residential Areas, Public Lands, Water Bodies or Roads	LTS	None Required	LTS		
AES-2:	Damage to Scenic Resources Viewed from a Scenic Highway Including, but Not Limited to, Trees, Rock Outcroppings, and Historic Buildings within a State Scenic Highway	LTS	None Required	LTS		
AES-3:	Substantial Degradation of the Existing Visual Character of the Site and its Surroundings in Non-Urbanized Areas	LTS	None Required	LTS		
AES-4:	Conflict with Applicable Zoning and Other Regulations Governing Scenic Quality in Urbanized Areas	LTS	None Required	LTS		
AES-5:	New Sources of Light or Glare	NI	None Required	NI		
3.3 Air	Quality					
AQ-1:	Conflict with or obstruct implementation of the applicable air quality plans	LTS	None Required	LTS		
AQ-2:	Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for which the Project Region is in Non- attainment	LTS	None Required	LTS		
AQ-3:	Expose Sensitive Receptors to Substantial Pollutant Concentrations	LTS	None Required	LTS		
AQ-4:	Result in Other Emissions Such As Odors Adversely Affecting a Substantial Number of People	PS	Mitigation Measure AQ-1: Locate Stockpiles of Odorous Materials at a Distance from Sensitive Receptors	LTS		
AQ-5:	Generate pollutants that will violate existing standards of air quality onsite or in the surrounding area	LTS	None Required	LTS		
3.4 Bio	logical Resources					
BIO-1:	Potential Adverse Effects on Special- Status Plant or Animal Species	PS	Mitigation Measure BIO-1:Provide CompensatoryMitigation for Special Status Plant SpeciesMitigation Measure BIO-2:Establish Tree ProtectionZones for Ground-disturbing Activities Near ButanoRidge CypressMitigation Measure BIO-3:Monitor Temporary Impactfrom Vegetation Management Activities on"Disturbance-Tolerant" Special-Status Plant SpeciesMitigation Measure BIO-4:Provide CompensatoryMitigation for the California Red-Legged Frog andCalifornia Tiger SalamanderMitigation Measure BIO-5:Provide CompensatoryMitigation for the San Francisco Garter SnakeMitigation Measure BIO-6:Pre-Activity Survey andAvoidanceMitigation Measure BIO-7:Provide Alternative Bat RoostHabitat	LTS		
BIO-2:	Potential Adverse Effects on Riparian Habitat or Other Sensitive Natural Communities Identified in Local or Regional Plans, Policies, Regulations or by California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), or National Marine Fisheries Service (NMFS)	PS	Mitigation Measure BIO-8: Provide Compensatory Mitigation for Woody Riparian Vegetation	LTS		
BIO-3:	Potential Adverse Effects on Federally Protected Wetlands as defined by Section 404 of the Clean Water Act	PS	Mitigation Measure BIO-9: Provide Compensatory Mitigation for Impacts on Wetlands and other Waters	LTS		

Potenti	al Impact	Level of Significance before Mitigation ¹	Mitigation Measures	Level of Significance after Mitigation ¹
BIO-4:	Potential Interference with Wildlife Movement, Established Wildlife Corridors, or the Use of Native Wildlife Nursery Sites	LTS	None Required	LTS
BIO-5:	Conflict with Local Policies or Ordinances Protecting Biological Resources, or an Adopted Habitat Conservation Plan or Natural Community Conservation Plan	LTS	None Required	LTS
BIO-6:	Be Located Inside or Within 200 Feet of a Marine or Wildlife Reserve	PS	Mitigation Measure BIO-8: Provide Compensatory Mitigation for Woody Riparian Vegetation Mitigation Measure BIO-9: Provide Compensatory Mitigation for Impacts on Wetlands and other Waters	LTS
BIO-7:	Result in Loss of Oak Woodlands or Other Non-Timber Trees	LTS	None Required	LTS
4.5 Cult	tural Resources			
CUL-1:	Adverse Change in Significance of Historical or Archaeological Resources	LTS	None Required	LTS
CUL-2:	Disturbance of Human Remains	LTS	None Required	LTS
4.6 Geo	logy, Soils, and Seismicity			
GEO-1:	Substantial Adverse Effects Resulting from Fault Rupture, Strong Seismic Ground Shaking, Liquefaction, or Coastal Cliff/Bluff Instability or Erosion	В	None Required	В
GEO-2:	Substantial Adverse Effects Resulting from Landslides	В	None Required	В
GEO-3:	Directly or Indirectly Destroy a Unique Paleontological Resource or Site or Unique Geologic Feature	LTS	None Required	LTS
4.7 Gre	enhouse Gas Emissions			
GHG-1:	Generate Greenhouse Gas (GHG) Emissions	LTS	None Required	LTS
GHG-2:	Potential to Conflict with Applicable Plans, Policies, or Regulations Adopted for the Purpose of Reducing the Emissions of GHGs	LTS	None Required	LTS
4.8 Haz	ards and Hazardous Materials			
HAZ-1:	Create a Significant Hazard to the Public or the Environment from the Routine Transport, Use, or Disposal of Hazardous Materials	PS	<u>Mitigation Measure HAZ-1</u> : Proper Handling and Disposal of Contaminated Soil, Sediment, and Groundwater	LTS
HAZ-2:	NZ-2: Create a Significant Hazard to the Public LTS N or the Environment through Reasonably Foreseeable Upset or Accident Conditions Involving the Release of Hazardous Materials		None Required	LTS
1AZ-3:	3: Emit Hazardous Emissions or Handle LTS None Required Hazardous or Acutely Hazardous Materials, Substances, or Wastes within 0.25 Mile of an Existing or Proposed School		LTS	
HAZ-4:	4: Result in a Significant Hazard to the PS Mitigation Measure HAZ-2: Review of Proximity to Public or the Environment from Location Existing Known Hazardous Materials Clean-up Sites and on a Known Hazardous Materials Site Implementation of Safety Precautions		LTS	
HAZ-5:	Result in a Safety Hazard or Excessive Noise for People Residing or Working in the Program Area within the Jurisdiction of an Airport Land Use Plan or within 2 Miles of an Airport or Private Airstrip	LTS	None Required	LTS

Potenti	al Impact	Level of Significance before Mitigation ¹	Mitigation Measures	Level of Significance after Mitigation ¹
	Impair Implementation of or Physically Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan	LTS	None Required	LTS
HAZ-7:	Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires	LTS	None Required	LTS
4.9 Hyd	rology and Water Quality			
HYD-1:	Violate Water Quality Standards or Waste Discharge Requirements or Otherwise Substantially Degrade Water Quality	LTS	None Required	LTS
HYD-2:	Substantially Alter Existing Drainage Pattern of Site or Area, or Create or Contribute Runoff Water That Exceeds Capacity of Stormwater Systems or Results in Substantial Erosion	LTS	None Required	LTS
HYD-3:	Harm to People or Structures due to Flooding as a Result of Dam Failure or Inundation by Seiche, Tsunami, or Mudflow	LTS	None Required	LTS
4.10 La	nd Use and Planning			
LU-1:	Division of Existing Communities	LTS	None Required	LTS
LU-2:	Incompatibility with Existing Activities and Land Uses and Inconsistencies with Applicable Land Use Plans or Policies (e.g. General Plans, Local Coastal Program, Land Use Designations and Zoning)	LTS	None Required	LTS
LU-3:	Result in the Congregation of More Than 50 People on a Regular Basis	NI	None Required	NI
LU-4:	Encourage Off-Site Development of Undeveloped Areas or Increase Development Intensity in Existing Developed Areas	NI	None Required	NI
4.11 No	vise			·
NOI-1:	Substantial Temporary or Permanent Increase in Ambient Noise Levels in the Vicinity of Proposed Maintenance Areas in excess of Standards Established in the Local General Plan or Noise Ordinance, or in other applicable Local, State or Federal Standards	PS	<u>Mitigation Measure NOI-1</u> : Employ Noise-Reducing Maintenance Practices <u>Mitigation Measure NOI-2</u> : Advance Notification of Nearby Sensitive Receptors <u>Mitigation Measure NOI-3</u> : Limit Nighttime Construction Noise	LTS
NOI-2:	Generation of Excessive Groundborne Vibration or Groundborne Noise Levels	PS	Mitigation Measure NOI-4: Implement Vibration Reduction Measures	LTS
NOI-3:	Be Located in the Vicinity of a Private Airstrip or an Airport Land Use Plan Area, or, within 2 miles of a Public Airport, and Expose People Residing or Working in the Project Site to Excessive Noise Levels	PS	<u>Mitigation Measure NOI-5</u> : Employee Best Management Practices at Airports	LTS
4.12 Pu	blic Services and Utilities			
PSU-1:	Effects on Wastewater Treatment Demand and Water Supply	LTS	None Required	LTS
PSU-2:	2: Effects on Public Services, including LTS None Required Police, Fire, and Emergency Response Times		LTS	
PSU-3:	Disruption to Utilities and Service System Facilities, including Storm Drainage, Electric Power, Natural Gas, or Telecommunications Facilities	LTS	None Required	LTS

Potenti	al Impact	Level of Significance before Mitigation ¹	Mitigation Measures	Level of Significance after Mitigation ¹
PSU-4:	Exceedance of Landfill Capacity or Non- Compliance with Regulations Related to Disposal of Excavated Sediment or Debris	LTS	None Required	LTS
4.13 Re	creation	_		
REC-1:	Increased Use of Recreational Facilities such that Substantial Deterioration Would Occur	LTS	None Required	LTS
REC-2:	Temporary Disruption of the Use, or Access of Recreational Facilities	LTS	None Required	LTS
4.14 Tra	ansportation and Traffic			
TRA-1:	Conflict with a Program Applicable Plan, ordinance, or Policy Addressing the Circulation System, Including Transit, Roadway, Bicycle and Pedestrian Facilities	LTS	None Required	LTS
TRA-2:	Result in Increased Vehicle Miles Traveled	LTS	None Required	LTS
TRA-3:	Substantially Increase Hazards due to a Geometric Design Feature or Incompatible Uses	LTS	None Required	LTS
TRA-4:	Result in Inadequate Emergency Access	LTS	None Required	LTS
4.15 Tri	ibal Cultural Resources (TCRs)			
TCR-1:	Cause a Substantial Adverse Change in the Significance of a TCR, as Defined in Pub. Res. Code Section 21074 or Determined to be Significant by the Lead Agency	LTS	None Required	LTS
4.16 W	ildfire			
WLD-1:	Substantially Impair an Adopted Emergency Response Plan or Emergency Evacuation Plan	LTS	None Required	LTS
WLD-2:	Exacerbate Wildfire Risks, and Thereby Expose Project Occupants to Pollutant Concentrations from a Wildfire/Expose People or Structures to Risks (e.g. flooding or landslides)	LTS	None Required	LTS
WLD-3:	Require the Installation or Maintenance of Associated Infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that May Exacerbate Fire Risk	LTS	None Required	LTS
Cumula	ntive Impacts	-	The second s	
	Cumulative Effects on Biological Resources	PS.	Mitigation Measure BIO-1: Provide Compensatory Mitigation for Special Status Plant Species Mitigation Measure BIO-2: Establish Tree Protection Zones for Ground-disturbing Activities Near Butano Ridge Cypress Mitigation Measure BIO-3: Monitor Temporary Impact from Vegetation Management Activities on "Disturbance-Tolerant" Special-Status Plant Species Mitigation for the California Red-Legged Frog and California Tiger Salamander Mitigation Measure BIO-5: Provide Compensatory Mitigation for the San Francisco Garter Snake Mitigation Measure BIO-6: Pre-Activity Survey and Avoidance Mitigation Measure BIO-7: Provide Alternative Bat Roost	LTS
			<u>Mitigation Measure BIO-8</u> : Provide Compensatory Mitigation for Woody Riparian Vegetation <u>Mitigation Measure BIO-9</u> : Provide Compensatory Mitigation for Impacts on Wetlands and other Waters	
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BMP Number	BMP Title	BMP Description
General Av	oidance and Minim	nization Measures
GEN-1	Staging and	 Staging, access, and parking areas will be located outside of sensitive habitats to the extent feasible.
	Access	 Staging areas will be located 30 feet from the top of bank (or as far as feasibly possible) or on the outboard side of levees. Vegetation removal shall be limited to the minimum amount necessary to provide access.
GEN-2	Minimize Area of Disturbance and Site Maintenance	 Areas of disturbance will be limited to the smallest footprint necessary. For maintenance activities near waterways or other sensitive habitat, the designated work area shall be clearly identified in the field using highly visible material, and work will not be conducted outside this area. Keep excavated soil and materials on the site where they will not collect into the street or get transported to storm drains or nearby water bodies by rainfall or runoff in order to avoid deleterious effects to fish, wildlife, and beneficial uses. Transfer excavated materials to dump trucks on the site, not in the street.
GEN-3	Construction	 Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control
	Entrances and Perimeter	 erosion and sediment discharges from site and tracking off site. Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking. When in-channel work is required, where available use existing ingress or egress points or perform work from the top of
		the stream banks.
GEN -4	Salvage/Reuse of Plant and Woody	 Large wood or weed-free topsoil displaced by project activities may be stockpiled for use during site restoration. Native vegetation displaced by project activities will be stockpiled if it would be useful during site restoration.
	Material	 Stockpiled material shall not be placed over riparian or wetland vegetation. Stockpiled material shall not be placed in areas where it could enter the stream, riparian or wetland areas.
	New Herendeur	To the extent feasible, all other woody material that is not re-usable should be disposed at a composting facility.
GEN-5	Non-Hazardous Materials	 Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
GEN-6	Hazardous Materials Storage/ Disposal	 Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state, and federal regulations. Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
		 Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours. Arrange for appropriate disposal of all hazardous wastes.
GEN-7	Spill Prevention	 Keep spill cleanup materials (rags, absorbents, etc.) available at the construction site at all times.
	and Control	 Inspect vehicles and equipment frequently for and repair leaks promptly. On-site monitor should insect beneath all vehicles that have been parked more than 15 minutes before they leave the work area. Use drip pans to catch leaks until repairs are made. Clean up spills or leaks immediately and dispose of cleanup materials properly. Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
		 Sweep up spilled dry materials immediately. Do not try to wash them away with water or bury them. If water must be used, the Contractor shall collect the water and spilled fluids and dispose of it as hazardous waste.
		 Clean up spills on dirt areas by digging up and properly disposing of contaminated soil. Small spills (less than 18 inches in diameter) including small quantities of oil, gasoline, paint or other materials should be controlled by the first responder (maintenance staff) and do not necessarily require an emergency response team. Medium spills (greater than 18 inches but less than 6 feet in diameter) are typically controlled by the first responder (maintenance staff) but police or fire department hazardous materials (HAZMAT) teams may be called based on conditions. Report significant spills (larger than 6 feet in diameter and any "running" spill) immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill, contact the San Mateo County Environmental Health Services Division, or other emergency office (e.g., local fire or police department) as warranted, immediately and document the spill using the spill documentation form. Alternatively, 1) dial 911, the local emergency response number, 2) the National Response Center at (800) 424-8802; or 2) call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours). As appropriate, contact other agencies including California Occupational Safety and Health Administration or the Regional Water Quality Control Board. All chemical spills shall be reported as soon as possible to the emergency site contact.
GEN-8	Waste Management	 Cover waste disposal containers securely at the end of every work day and during wet weather. Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site. Ensure that portable toilets have a secondary containment plan (e.g., a containment pan). Clean or replace portable toilets and inspect them frequently for leaks and spills.

BMP Number	BMP Title	BMP Description
		 Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
		 Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.
GEN-9	Vehicle	 Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
	Maintenance and Parking	 Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
	and ranking	 Conduct vehicle and equipment cleaning at County corporation yards and ensure that rinse water does not run into gutters, streets, storm drains, or surface waters.
		 If vehicle maintenance must be done on-site, work in a bermed area (e.g., sand bags, gravel bags, compost socks, or other barrier material) at least 150 feet away from creek channels, away from storm drains and over a drip pan big enough to collect fluids.
		 Keep an ample supply of spill clean-up materials near fueling, vehicle maintenance and hazardous materials/hazardous waste storage areas. Inventory clean-up materials monthly and restock as needed.
		 Post proper fueling and spill clean-up instructions at fueling areas. Never leave the area while equipment is being filled. Recycle or dispose of fluids as hazardous waste.
		 Do not clean vehicle or equipment on-site using soaps, solvents, degreasers, steam cleaning equipment, etc.
		 Perform vehicle and mobile equipment steam cleaning, pressure washing or degreasing only over a containment designed to collect any generated wash water. Collect wash water and discharge to sewer via an oil water separator. Do not pour wash water down storm drains or sewers connected to septic systems.
GEN -10	Equipment Maintenance &	 A separate area should be designated for equipment maintenance and fueling, away from any slopes, watercourses, or drainage facilities.
	Fueling	 Equipment should not be stored in areas that will potentially drain to watercourses or drainage facilities. If equipment must be stored in areas with the potential to generate runoff, drip pans, berms, sandbags, or absorbent booms should be employed to contain any leaks or spills.
		 Equipment should be inspected daily for leaks or damage and promptly repaired.
		 Fueling and maintenance of vehicles should take place at least 65 feet away from waterways.
		 In the event of a spill, follow procedures outlined in BMP GEN-7.
GEN-11	Paving and Asphalt Work	 Avoid paving and seal coating in wet weather or when rain is in the forecast, to prevent materials that have not cured from contacting stormwater runoff.
1		 Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal or fog seal; and when saw cutting asphalt or concrete.
		Collect and recycle or appropriate dispose of excess abrasive gravel or sand. Do not sweep this material into gutters.
		 Do not use water to wash down fresh asphalt concrete pavement.
		 Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system. Shovel, absorb or vacuum saw-cut slurry and dispose of all waste as soon as work is complete in one location or at the end
		of the work day.
GEN-12	Concrete, Grout and Mortar	 Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff and wind.
	Application	 Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of in accordance to local regulations.
		 When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.
GEN-13	Exclude Concrete from Channel	 For maintenance activities that involve concrete pouring, the County shall ensure that poured concrete be excluded from the wetted channel for a period of 30 days after it is poured. During that time, the poured concrete shall be kept moist, and runoff from the concrete shall not be allowed to enter a stream.
		 Commercial sealants may be applied to the poured concrete surface where difficulty in excluding water flow for a long period may occur. If sealant is used, water shall be excluded from the site until the sealant is dry. Containment structures should be installed to control the placement of wet concrete and to prevent it from entering the channel outside of those structures.
		 Commercial sealants may be applied to the poured concrete surface where difficulty in excluding water flow for a long period may occur. If sealant is used, water shall be excluded from the site until the sealant is dry.
		 No dry concrete shall be placed on the banks or in a location where it could be carried into the channel by wind or runoff.
GEN-14	Concrete Washout Facilities	 Concrete washout facilities should be established for maintenance activities that require on-site preparation and use of Portland cement concrete, asphalt concrete or cement morta. These facilities capture wash water, concrete and aggregate flushed from concrete mixers, chutes, etc. Concrete washouts may be contained settling basins dug into the ground, raised
		 and contained structures, trailers, etc. They are also applicable for projects that require equipment washouts. An appropriate area for the washout must be identified at least 65 feet away from watercourses and storm drains in case of accidental breaching. The storage capacity of the basin must be sized correctly for the job.
		 The location of the concrete washout should be clearly labeled and all employees should be educated about proper concrete disposal.

BMP Number	BMP Title	BMP Description
		 Avoid mixing excess amounts of fresh concrete or cement mortar on-site. Wash out concrete mixers only in designated washout areas where the water will flow into temporary sealed basins. Use as
		little water as possible to reduce hardening and evaporation time of waste products.
		 Construct a basin large enough to contain all liquid and waste concrete materials generated during washout procedures. A minimum basin size is 9 feet x 9 feet and 2 feet deep. Plastic liner materials shall be a minimum of 60-mil polyethylene sheeting free of holes and defects.
		 Recycle washout by pumping back into mixers for reuse when possible.
		 The concrete washout should be checked frequently to ensure proper use and effectiveness.
		 At 75 percent capacity, the washout must be cleaned or new facilities must be constructed and ready for use.
		 The hardened concrete and materials related to the washout must be broken up, removed, and disposed of in accordance to local regulations.
1.51		 Area disturbed by the concrete washout must be repaired.
SEN-15	Painting and	 Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
	Paint Removal	 For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
		 For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
		 Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
		 Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.
GEN-16	Timing of Work	 In general, routine maintenance and construction activities that take place in sensitive habitat and/or in channels below ordinary high water will be conducted during the dry season (June 15 through October 15). Maintenance activities that are in upland areas and that would not affect streams may occur at times when there is no predicted rainfall (chance of precipitation is less than 30 percent chance of rain). Activities that are subject to permit requirements will be conducted during the period authorized by the permits.
GEN-17	Maintain Traffic Flow	 To the extent feasible, work shall be staged and conducted in a manner that maintains two-way traffic flow on roadways in the vicinity of the work site.
		 Heavy equipment and haul traffic shall be prohibited in residential areas to the greatest extent feasible. When no other route to and from the site is available, heavy equipment and haul traffic through residential areas shall be restricted to the hours of 8 a.m. to 5:30 p.m., Monday through Friday.
		 If heavy equipment or hauling is required beyond the hours above, the County or their contractor would provide notice to adjacent property owners 48 hours in advance of such activities.
GEN-18	Traffic Control and Public Safety	 In the event that work activities require the temporary closure of any traffic lanes, the County shall implement measures to guide traffic (such as signage and flaggers), safeguard construction workers, provide safe passage of vehicles, and minimize traffic impacts through the duration of work activities. The County also shall notify local emergency service providers regarding any planned lane closures.
		 For any other work within or near the roadway that could pose a hazard to the public, the County shall install/implement appropriate measures, such as fences, barriers, flagging, guards, and/or signs, to give adequate warning and provide protection from the potentially dangerous condition.
	1. I.	 For work activities along or near roadways with sidewalks and bike lanes, the County shall implement measures to ensure the safe passage of pedestrians and bicyclists around the work site.
		 Where work is proposed at a recreational park or trail, warning signs will be posted several feet beyond the limits of work. Signs will also be posted if trails will be temporarily closed.
		 Public transit access and routes will be maintained in the vicinity of the work site. If public transit will be affected by temporary road closures and require detours, affected transit authorities will be consulted and kept informed of project activities.
SEN-19	Dust Management	 The County will implement the Bay Area Air Quality Management District (BAAQMD) Basic Dust Control Measures. Current measures stipulated by the BAAQMD Guidelines include the following:
	Controls	 All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day or as necessary.
		 All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
		 All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
		 All vehicle speeds on unpaved roads shall be limited to 15 mph.
		 All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
		 Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

BMP Number	BMP Title	BMP Description
		 All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
GEN-20	Firearms	 No firearms (except for federal, State, or local law enforcement officers and security personnel) will be permitted at the project site to avoid harassment, killing or injuring of wildlife.
GEN-21	Domestic Animals	 No animals (e.g., dogs or cats) can be brought to the project site to avoid harassment, killing or injuring of wildlife.
GEN -22	Site Stabilization	 Earthwork will be completed as quickly as possible, and where practical, site restoration will occur immediately following maintenance. If site restoration involves planting, such activities may commence in late fall or early winter during the onset of rainy season.
		 Bare soil surfaces resulting from maintenance and/or construction activities shall be covered with suitable erosion controls (seed or plant vegetation, fabrics, hydroseeding, mulch, etc.):
		- Within 12 hours of any break in work unless project activities will resume within 7 days.
		- No later than 3 days following the disturbance during the rainy season (approximately October through April).
		 No later than 7 days following the disturbance during the dry season (approximately May through September). Every effort shall be made to immediately cover bare soil surfaces resulting from maintenance and/or construction activities prior to storms.
		 Revegetation activities will include only local plant materials native to the San Francisco Peninsula region.
GEN-23	Fire Prevention	 All earthmoving and portable equipment with internal combustion engines will be equipped with spark arrestors.
		 During the high fire danger period (April 1–December 1), work crews will:
		- Have appropriate fire suppression equipment available at the work site.
		- Keep flammable materials, including flammable vegetation slash, at least 10 feet away from any equipment that could produce a spark, fire, or flame.
		 Not use portable tools powered by gasoline-fueled internal combustion engines within 25 feet of any flammable materials unless a round-point shovel or fire extinguisher is within immediate reach of the work crew (no more 25 feet away from the work area).
GEN-24	Investigation of Utility Line Locations	An evaluation of the locations of utility lines that could be affected by maintenance activities will be conducted annually as part of the preparation of the Annual Notification. Utilities will be avoided as much as possible. For maintenance areas with th potential for effects on utility services, the following measures will be implemented:
		 Utility excavation or encroachment permits will be required from the appropriate agencies. These permits include measures to minimize utility disruption. The County and its contractors will comply with permit conditions. Such condition will be included in construction contract specifications.
		 Utility locations will be verified through a field survey (potholing) and use of the Underground Service Alert services.
		 Detailed specifications will be prepared as part of the design plans to include procedures for the excavation, support, and/or fill of areas around utility cables and pipelines. All affected utility services will be notified of the County's maintenance plans and schedule. Arrangements will be made with these entities regarding protection, relocation, or temporary disconnection of services.
		 Residents and businesses in the project area will be notified of planned utility service disruption 2 to 4 days in advance, in conformance with state standards.
		 Disconnected cables and lines will be reconnected promptly.
GEN-25	Retention of Tree Stumps / Rootwads	 Objects embedded/anchored in the bank, such as tree stumps, shall not be removed if removal could result in release of sediment into the channel. Stumps and rootwads that potentially serve as basking sites or that encourage pool formation should be left in place whenever possible. Protruding objects that could capture additional debris and result in obstruction of the channel (e.g. the branches and trunk of a downed tree) may be trimmed. If an embedded object must be removed to prevent a debris jam, turbidity control practices shall be used, and the bank shall be reseeded, re-vegetated and/or mulched following removal.
GEN-26	Decontamination of Project Equipment and Vehicles	Equipment, boots and waders used for in-water maintenance activities will be decontaminated prior to entering and exiting the maintenance site and/or between each use in different water bodies to avoid the introduction and transfer of organisms between water bodies. Methods to be employed may include: drying, using a hot water soak, or freezing, as appropriate to the type of gear or equipment. The County shall begin the decontamination process by thoroughly scrubbing equipment, paying close attention to small crevices such as boot laces, seams, net corners, etc., with a stiff-bristled brush to remove all organisms. To decontaminate by drying, the County shall allow equipment to dry thoroughly (i.e., until there is a complete absence of water), preferably in the sun, for a minimum of 48 hours. To decontaminate by freezing, the County shall place equipment in a freezer 32°F or colder for a minimum of 8 hours. Repeat decontaminate by freezing, the County shall place equipment in a freezer 32°F or colder for a minimum of 8 hours. Repeat decontaminate by freezing, the county if the equipment in service from the site, used within a different waterbody, and returned to the project site.
		 Vehicles, watercraft, and other maintenance equipment used for in-water maintenance activities that are too large to immerse in a hot water bath shall be decontaminated by pressure washing with hot water (minimum of 140°F at the point of contact or 155°F at the nozzle or by using other effective techniques). Watercraft engines and all areas that could contain standing water (e.g., live wells, bilges, etc.) shall be flushed for a minimum of 10 minutes. Following the hot water wash, vehicles, watercraft and equipment shall be dried as thoroughly as possible.

BMP Number	BMP Title	BMP Description
	1.	 A bleach solution shall be used to decontaminate vehicles, watercraft and other maintenance gear and equipment at a designated location where runoff can be contained and not allowed to enter streams or other sensitive habitat areas.
GEN-27	Vegetation and Tree Removal	 The disturbance or removal of vegetation shall not exceed the minimum necessary to complete maintenance activities. The use of buildozers, backhoes, or other heavy equipment to remove vegetation along stream banks shall be avoided wherever feasible.
		The County may remove up to two non-hazardous trees greater than 12 inches in diameter per year from natural channels below ordinary high water if the trees are restricting the capacity of the channel, causing erosion or flooding, or limiting access to perform maintenance work. Trees will be cut at ground level and the root mass left in place to maintain bank stability. No non-hazardous trees greater than 36 inches in diameter will be removed under this program. This measure does not apply to trees considered a hazard as defined by the International Society of Arboriculture, which may include dead or dying trees, dead parts of live trees, or unstable live trees (due to structural defects or other factors) that are within striking distance of people or property (a target) that have the potential to cause death, injury, or substantial property damage.
		 Removed vegetation shall be placed directly into a disposal vehicle and removed from the site, and shall not be permitted to remain onsite overnight. However, if removed vegetation will be used onsite for erosion control or slash and will not be moved or disturbed, it may be stockpiled onsite for longer than an overnight. Stockpiled vegetation shall not be piled on the ground unless it is later transferred, piece by piece, under the direct supervision of the biological monitor or qualified biologist.
GEN-28	Herbicide Application	 Herbicide application shall only be conducted when the climate is dry and when wind speeds do not exceed 7 miles per hour. Herbicides shall not be used in or adjacent to any fish-bearing stream, lake, pond or other water bodies supporting suitable habitat for California red-legged frog or other listed species.
Erosion Co	ntrol Measures	
EC-1	Brush Layering	Brush layering is a technique used to stabilize shallow slope failures or rebuild fill slopes with live brush cuttings (usually willows or other types of branches) with soil backfill or soil lifts. Live brush layers act as horizontal drains and improve slope stability by providing tensile strength and natural revegetation. Brush layering may include the use of synthetic geogrids or fabric soil wraps, large vegetated boulder revetments, or other structural toe support. For a more detailed description of this BMP, refer to Appendix A.
EC-2	Brush Packing	Brush packing is a biotechnical gully and slump repair technique. Brush packing utilizes alternating layers of live branch cuttings (from rootable plant species) and soil to repair large rills, gullies, and slumps. The brush packing technique is more appropriate for the repair of gullies on slopes, and it can be implemented with hand labor. For a more detailed description of this BMP, refer to Appendix A.
EC-3	Live Staking	Live staking involves the insertion of live, vegetative cuttings into the ground in a manner that allows the cutting (stake) to take root and grow. This BMP is used to reduce the potential for soil to become water borne, to reduce water velocity and erosive forces, and to aid in habitat protection. Poles used in willow walls and through rip rap may be a structural application. Sprigs may be used in individual planting spots along a streambank. For a more detailed description of this BMP, refer to Appendix A.
EC-4	Live Pole Drain	Live pole drains are a biotechnical technique intended to drain excess moisture away from an unstable site. Plants (typically willows) are used to construct bundles which will sprout and grow, with the moisture continuing to drain from the lower end. The bundles are placed in shallow trenches in a manner that they intersect and collect excessive slope moisture. See Appendix A for additional description about this BMP.
EC-5	Wattles/ Fascines	Wattles and fascines are live branch cuttings, usually willows, bound together into long, tubular bundles used to stabilize slopes and stream banks. Both wattles and live fascines are true biotechnical practices. The live branches and live stakes provide the biological element while the stems, rope ties and wedge-shaped wooden stakes all combine to provide the structural elements. Fascines differ from wattles in that the branch cuttings all point in the same direction in fascines, where they may point in either direction in wattles. Wattles are typically aligned on contour, where fascines are angled slightly upslope and thus tend to produce more vigorous growth. For a more detailed description of this BMP, refer to Appendix A.
EC-6	Hand Seeding	Hand seeding is broadcasting grass seed on disturbed or bare soil areas by hand or a hand seeding device. This BMP is used to reduce the potential for soil to become water or air borne, reduce erosion after vegetation establishment, provide for vegetative buffers and aid in habitat protection. Seeding with appropriate seed mixes also helps discourage colonization by non-native and invasive plant species. For a more detailed description of this BMP, refer to Appendix A.
EC-7	Hydroseeding	Hydroseeding is broadcasting grass seed, tackifier, wood fiber mulch, or other similar substance, and water on disturbed areas using a hydroseeding machine. This BMP is used to reduce the potential for soil becoming water or air borne, to reduce erosion before and after vegetation is established, provide vegetative buffers and to aid in habitat protection. Seeding with appropriate seed mixes will also help discourage colonization by non-native and invasive plant species. Hydroseeding may be used after soil disturbance is completed at construction/maintenance sites and/or on bare slopes. For a more detailed description of this BMP, refer to Appendix A.
EC-8	Mulching	Mulching is the application of rice or sterile straw, wood chips, leaf litter, redwood duff, or other suitable materials on the soil surface applied manually or by machine. This BMP is used to reduce the potential for soil becoming water or air borne, and to encourage vegetation establishment. This BMP is used to protect the soil surface and to protect newly seeded areas. For a more detailed description of this BMP, refer to Appendix A.
EC-9	Vegetative Buffer	A vegetative buffer is a strip of vegetation adjacent to sensitive areas, ditches, pavement and water bodies. This BMP prevents soil from becoming water borne and may help restore shallow slope failures by trapping soil and debris. For a more detailed description of this BMP, refer to Appendix A.

BMP Number	BMP Title	BMP Description
EC-10	Erosion Control Blankets and Mats	Erosion control blankets and mats are installed to protect the prepared soil surface of a steep slope. This BMP may be used at maintenance sites to provide stabilization/protection on steep slopes or stream banks. Erosion control blankets and mats are available in a variety of materials including jute, excelsior, blanket material, straw, wood fiber blanket, coconut fiber blanket, coconut fiber blanket. Material selection should be based on the size of area, slope, surface conditions, revegetation plans, and channel velocity. Coir fabric/netting is a geo-textile product made from coconut fibers loosely woven into a fabric usually packaged in roll form. This fabric can be used to provide a reduction in water velocity/erosive forces and/or habitat protection and topsoil stabilization. Erosion control blankets and mats may be used in combination with seeding and/or vegetation. For a more detailed description of this BMP, refer to Appendix A.
EC-11	Surface Roughening	Surface roughening is a technique for roughening a bare soil surface with furrows running across the slope, stair stepping, or tracking with construction equipment. Surface roughening is intended to aid the establishment of vegetative cover from seed, to reduce runoff velocity and increase infiltration, and to reduce erosion and provide for sediment trapping. This BMP is typically applied on slopes steeper than 3:1. For a more detailed description of this BMP, refer to Appendix A.
EC-12	Rolling Dip	Rolling dips are ridges or ridge-and-channels constructed diagonally across a sloping road or utility right-of-way that is subject to erosion to limit the accumulation of erosive volumes of water on roads by diverting surface runoff at designated intervals. Rolling dips are appropriate to use on low and moderate grades and on both high or low traffic roads. For a more detailed description of this BMP, refer to Appendix A.
EC-13	Slope or Bank Stabilization	Where biotechnical methods are unsuitable for stabilizing streambanks, hardened solutions such as rock slope protection may be utilized along a failed portion of slope to provide a buttress against additional failure. To the extent feasible, this BMP should be combined with biotechnical solutions through installation of vegetated boulder revetments or vegetated rock slope protection. Refer to Appendix A for a more detailed description of this BMP.
EC-14	Energy Dissipator	An energy dissipator is a structure designed to control erosion at the outlet of a channel or conduit by reducing the velocity of flow and dissipating the energy. This BMP is recommended at the outlet of any new or replacement drainage culvert, which are points of high erosion potential. Energy dissipators are effective in absorbing the impact of flow and reducing the velocity to non-erosive levels. For a more detailed description of this BMP, refer to Appendix A.
Sediment/	Water Quality Con	trol Measures
SC-1	Gravel Bags	Gravel bags can be used to keep water away from work areas and unstable slopes or for constructing cofferdams and clean water bypasses. This BMP is also typically used at construction or maintenance sites to protect storm drain outlets, gutters, ditches, and drainage courses. For a more detailed description of this BMP, refer to Appendix A.
SC-2	Silt Fence	A silt fence is a temporary sediment barrier consisting of fabric stretched across and attached to supporting posts and entrenched into soil. This BMP is generally used for perimeter protection (around construction/maintenance sites, stockpile areas). It may also be installed perpendicular to the flow direction to slow or stop water and to allow perimeter filtration, settling of soil particles, and to reduce water velocity. For a more detailed description of this BMP, refer to Appendix A.
SC-3	Straw Log, Straw Roll, Coir Log	Straw rolls/logs or coir logs may be used for temporary soil stockpile protection; protection of storm drains, gutters, and drainage courses; temporary check dams; bank or slope stabilization; and streambank toe protection. Alternatives to straw rolls/logs and coir logs include compostable filter socks/berms comprised of natural fibers and other bio-based materials. For a more detailed description of this BMP, refer to Appendix A.
SC-4	Inlet Protection	Storm drain inlets can be protected through installation of temporary barriers such as silt fences, gravel bags, and other proprietary barriers like geotextile inserts, biofilter bags, or compost socks. These barriers are intended to prevent and reduce the sediment discharged into storm drains by ponding runoff and allowing sediment to settle out. For a more detailed description of this BMP, refer to Appendix A.
SC-5	Stormwater Separation Systems	Stormwater separation systems are engineered devices installed in storm drain facilities to remove solids, grease and other pollutants. These may be installed where deep structures allow for their placement and maintenance, or where sufficient quantities of pollutant materials require regular removal in order for the storm drains to operate correctly. For a more detailed description of this BMP, refer to Appendix A.
SC-6	Diversion Berm	A diversion berm is a temporary ridge of compacted soil or aggregate base material, sandbags or contiguous bag berm constructed at the top or base of a disturbed slope. It may also consist of asphalt concrete or "cutback" at the top of a disturbed slope. This BMP is intended to direct stormwater runoff away from an unstable slope. For a more detailed description of this BMP, refer to Appendix A.
SC-7	Silt Curtain	The County shall install silt curtains or other appropriate silt filtering devices around excavation sites to prevent heavily silted water from impacting areas around the work site. The silt curtain or silt filtering device shall be maintained throughout all phases of excavation.
SC-8	Turbidity Monitoring	During in-water maintenance activities, the County will monitor turbidity levels up and downstream of the maintenance work area prior to conducting maintenance. The County will maintain a log of turbidity data and ensure that activities do not result in increases in turbidity of the stream of more than 20 percent of upstream sampling locations, as measured visually or by nephelometric turbidity units (NTU). Work will be halted if turbidity/siltation levels exceed 20 percent of upstream sampling levels and CDFW will be contacted for further guidance to ensure activities do not harm aquatic life.
Dewaterin	g Measure	
DW-1	Channel Dewatering	 When in-water construction is unavoidable, streamflow shall be diverted around work areas by either installing cofferdams and/or clean water bypass systems. A cofferdam is a temporary structure built into a waterway to enclose a construction area and reduce sediment pollution from construction work in or adjacent to water. A clean water bypass is typically used for short-term diversion of small amounts of water over short distances to enable dewatering of a maintenance site. Depending on site conditions, these systems may be either gravity driven or require use of a pump to divert water around a construction area. For a more detailed description of this BMP, refer to Appendix A.

BMP Number	BMP Title	BMP Description
		 No dewatering will be conducted at creek sites with recent document occurrences of coho salmon within the past 5 years.
Sediment T	esting and Disposa	l Measure
ST-1	Testing and Disposal of Sediment	Depending on the location of the sediment removal site and upstream and adjacent land uses, the County will test the sediment prior to removal to determine suitability for disposal or reuse based on its chemical qualities. The test results and proposed disposal or reuse locations will be submitted to the Regional Water Quality Control Board (RWQCB) for review and approval. Samples will be analyzed according to the Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines (RWQCB 2000), as appropriate for the proposed disposal or reuse site. The results will be compared against federal and state environmental screening levels (ESLs) for protection of human health, groundwater quality, and terrestrial receptors. If hazardous levels of contaminants (as defined by federal and state regulations) are present, the material will be taken to a permitted hazardous waste facility.

BMP Number	BMP Title	BMP Description
BIO-1	Environmental Awareness Training	Prior to commencing maintenance activities in a given year, all participating maintenance personnel will attend a worker environmental awareness training program. The training will include a brief review of special-status species, sensitive habitats, and other sensitive resources that may exist in the project area, including field identification, habitat requirements, and the legal status and protection of each relevant species, as well as locations of sensitive biological resources. The training will include materials concerning the following topics: sensitive resources, resource avoidance, permit conditions, and possible consequences for violations of State or Federal environmental laws. The training will cover the maintenance activity's conservation measures, environmental permits, and regulatory compliance requirements, as well as the roles and authority of the monitors and biologist(s). It will include printed material and an oral training session by a qualified biologist.
BIO-2	Minimize Injury or Mortality of Fish and Amphibian Species during Dewatering	 Prior to dewatering a construction site, all reasonable efforts shall be made to capture and relocate native fish and amphibian species if necessary to avoid direct mortality and minimize take. Streams that support a sensitive species (e.g., steelhead, California red-legged frog) will require a relocation effort led by a qualified biologist (see also BMPs BIO- 3 through BIO-5). The following measures are consistent with those defined as <i>reasonable and prudent</i> by NMFS for projects concerning several central California Evolutionarily Significant Units for coho salmon and steelhead trout. Fish relocation activities will be performed only by qualified fisheries biologists that have experience with fish capture and handling. Perform relocation activities during morning periods when air temperatures are coolest. Periodically measure air and water temperatures. Cease activities when water temperatures exceed temperatures allowed by CDFW and NMFS.
		 Capture methods may include fish landing nets, dip nets, buckets and by hand. Exclude fish from re-entering work area by blocking the stream channel above and below the work area with fine-meshed net or screens. Mesh will be no greater than 1/8 inch (3.1mm). The bottom edge of net or screen will be completely secured to the channel bed to prevent fish from re-entering work area. Exclusion screening will be placed in areas of low water velocity to minimize impingement of fish. Screens will be checked periodically and cleaned of debris to permit free flow of water.
		 Prior to capturing fish, the qualified biologist will determine the most appropriate release location(s). Captured aquatic life shall be released immediately in the closest suitable body of water adjacent to the work site, taking into consideration the following when selecting release site(s): Similar water temperature as capture location Ample habitat for captured fish Low likelihood of fish re-entering work site or becoming impinged on exclusion net or screen.
		 Avoid areas with large concentrations of potential predators in immediate vicinity. Minimize handling of salmonids. However, when handling is necessary, always wet hands or nets prior to touching fish. Temporarily hold fish in cool, shaded, aerated water in a container with a lid or in a live-car (i.e., a net enclosure that can be placed in a pond to temporarily hold the fish). If fish are held in a container, provide aeration with a battery-powered external bubbler. Protect fish from jostling and noise and do not remove fish from this container until time of release. Place a thermometer in holding containers and, if necessary, periodically conduct partial water changes to maintain a stable water temperature. If water temperature reaches or exceeds those allowed by CDFW and NMFS, fish should be released and rescue operations ceased. Avoid overcrowding in containers. Have at least two containers and segregate young-of-year fish from larger age-classes to avoid predation. Place larger amphibians, such as Pacific giant salamanders, in container with larger fish. If fish are abundant, periodically cease capture, and release fish at predetermined locations. Visually identify species and estimate year-classes of fish at time of release. Count and record the number of fish captured. Avoid anesthetizing or measuring fish. Submit reports of fish relocation activities to CDFW and NMFS in a timely fashion. If feasible, plan on performing initial fish relocation efforts several days prior to the start of construction. This provides the fisheries biologist an opportunity to return to the work area and perform additional passes immediately prior to construction. In many instances, additional fish will be captured that eluded the previous day's efforts. The biological monitor or qualified biologist shall check daily for stranded aquatic life as the water level in the dewatering area drops. If mortality during relocation
BIO-3	California Red-legged Frog Protection Measures	 percent, stop efforts and immediately contact the appropriate agencies (CDFW and NMFS). If suitable habitat for California red-legged frog is determined to exist in or around the work area where maintenance activities are planned to occur, the County will implement applicable protection measures as follows: No more than twenty-four (24) hours prior to the date of initial ground disturbance or mowing, a pre-activity survey for the California red-legged frog will be conducted by a qualified biologist at the work site. The survey will consist of walking the work area limits to ascertain the possible presence of the species. The qualified biologist will investigate all potential areas that could be used by the California red-legged frog frog for feeding, breeding, sheltering, movement, and other essential behaviors. This includes an adequate examination of mammal burrows, such as those of California ground squirrels (<i>Spermophilus beecheyi</i>) or gophers (<i>Thomonys bottae</i>). If any adults, subadults, juveniles, tadpoles, or eggs are found, the qualified biologist will contact the U.S. Fish and Wildlife Service (USFWS) to determine if

BMP Number	BMP Title	BMP Description
		 moving any of the individuals is appropriate. If the USFWS approves moving animals, the biologist and USFWS will identify a suitable relocation site, and the County will ensure the qualified biologist is given sufficient time to move the animals from the work site before ground disturbance is initiated. Only qualified biologists will capture, handle, and monitor the California red-legged frog. To minimize harassment, injury, death, and harm to individual California red-legged frogs, one of the following two more resource will be inclumented.
		 An approved, qualified biologist(s) will be on-site during all activities that may result in take of the California red-legged frog, as determined by the biologist taking into account all information gathered during the desktop audit of the site as well as the preconstruction survey. Qualified biologists must be approved by the USFWS.
		 Prior to pre-activity surveys, personnel will enclose the work area with an exclusion fence with a minimum height above grade of 42 inches. The bottom of the fence will either be buried a minimum of six inches below ground or otherwise secured in a manner approved by the USFWS and will remain in place during all maintenance activities in order to prevent California red-legged frogs from entering the work area. Escape ramps, funnels, or other features that allow animals to exit the work area, but which will prohibit the entry of such animals, will be provided in the exclusion fencing. A qualified biologist will conduct a pre-activity survey of the fence installation area immediately prior to (i.e., the day of) the commencement of installation and will be on-hand to monitor fence installation. The exclusion fencing will be inspected daily by maintenance personnel and maintained for the duration of maintenance implementation.
		The qualified biologist(s) will be given the authority to freely communicate verbally, by telephone, electronic mail, or in writing at any time with maintenance personnel, any other person(s) at the work area, otherwise associated with the maintenance work, the USFWS, the CDFW, or their designated agents. The qualified biologist will have oversight over implementation of all the conservation measures in this programmatic biological opinion, and will have the authority and responsibility to stop work activities if they determine any of the associated requirements are not being fulfilled. If the qualified biologist(s) exercises this authority, the USFWS will be notified by telephone and electronic mail within twenty-four (24) hours. The USFWS contact is the Coast Bay Foothills Division Chief of the Endangered Species Program at the Sacramento Fish and Wildlife Office at telephone (916) 414-6600.
		 The County will minimize adverse impacts to the California red-legged frog by limiting, to the maximum extent possible, the number of access routes, ground disturbance area, equipment staging, storage, parking, and stockpile areas. Prior to initiating maintenance work that involve ground-disturbing activities, equipment staging areas, site access routes, sediment removal and transportation equipment and personnel parking areas, debris storage areas, and any other areas that may be disturbed will be identified, surveyed by the qualified biologist, and clearly identified with fencing. The fencing will be inspected by the qualified biologist and maintained daily until the last day that equipment is at the site.
		 To the extent practicable, ground-disturbing activities will be avoided from October through April because that is the time period when California red-legged frogs are most likely to be moving through upland areas. When ground- disturbing activities must take place between November 1 and March 31, the County will ensure that daily monitoring by the qualified biologist is completed for the California red-legged frog.
		 If egg masses are present and work cannot be postponed until after hatching, a buffer of vegetation at least 10 feet in diameter shall be left around any egg masses found. Staff will keep a record of any sites where egg masses are found and will conduct vegetation removal at these sites between June 15 and October 15. Staff shall avoid entering the channel to avoid dislodging egg masses. Activities shall be performed from the banks.
		 To minimize harassment, injury, death, and harm in the form of temporary habitat disturbances, all maintenance- related vehicle traffic will be restricted to established roads, sediment removal and access areas, equipment staging, storage, parking, and stockpile areas. These areas will be included in pre-activity surveys and, to the maximum extent possible, established in locations disturbed by previous activities to prevent further adverse impacts. Maintenance- related vehicles will observe a 20-mile per hour speed limit within work areas, except on County roads, and State and Federal highways. Off-road traffic outside of designated and fenced work areas will be prohibited.
		When a California red-legged frog is encountered in the work area, all activities which have the potential to result in the harassment, injury, or death of the individual will be immediately halted. The qualified biologist will then assess the situation in order to select a course of action that will avoid or minimize adverse impacts to the animal. To the maximum extent possible, contact with the frog will be avoided and the individual will be allowed to move out of the potentially hazardous situation to a secure location on its own volition. This procedure applies to situations where a California red-legged frog is encountered while it is moving to another location. It does not apply to animals that are uncovered or otherwise exposed or in areas where there is not sufficient adjacent habitat to support the species should the individual move away from the hazardous location.
		California red-legged frogs that are in danger will be relocated and released by the qualified biologist outside the worl area within the same riparian area or watershed. If relocation of the individual outside the work area is not feasible (i.e., there are too many individuals observed per day), the biologist will relocate the animals to a USFWS preapprover location. Prior to the initial ground disturbance, the County will obtain approval of the relocation protocol from the USFWS in the event that a California red-legged frog is encountered and needs to be moved away from the work site. Under no circumstances will a California red-legged frog be released on a site unless the written permission of the landowner has been obtained by the County. The qualified biologist will limit the duration of the handling and captivity of the California red-legged frog to the minimum amount of time necessary to complete the task. If the animal must be held in captivity, it will be kept in a cool, dark, moist, aerated environment, such as a clean and disinfected bucket or plastic container with a damp sponge.

BMP Number	BMP Title	BMP Description
		 The County will immediately notify the USFWS once the California red-legged frog and the site is secure. The USFWS contact for this situation is the Coast Bay Foothills Division Chief of the Endangered Species Program by email and at telephone (916) 414-6600.
		 A litter control program will be instituted at each activity site. All workers will ensure their food scraps, paper wrappers, food containers, cans, bottles, and other trash are deposited in covered or closed trash containers. The trash containers will be removed from the site at the end of each working day.
		The County will comply with all herbicide application requirements mandated by the U.S. Environmental Protection Agency (USEPA) and stipulated injunctions pertaining to California red-legged frog. For example, herbicides will be limited for controlling state-designated invasive species and noxious weeds, will not be used within 15 feet of aquatic breeding critical habitat or non-breeding aquatic critical habitat areas or within 15 feet of aquatic features within non critical habitat sections subject to the 2006 Court-ordered injunction; precipitation is not occurring or forecast to occur within 24 hours; herbicide is limited to localized spot treatment using hand-held devices; and herbicide will be applied by a certified applicator or person working under the direct supervision of a certified applicator.
		 For on-site storage of pipes, conduits and other materials that could provide shelter for California red-legged frogs, materials will be securely capped prior to storage or an open-top trailer will be used to elevate the materials above ground. This is intended to reduce the potential for animals to climb into the conduits and other materials.
		 To the maximum extent practicable, no maintenance activities will occur during rain events or within 24-hours following a rain event. Prior to maintenance activities resuming, a qualified biologist will inspect the work area and all equipment/materials for the presence of California red-legged frogs. The animals will be allowed to move away from the work site of their own volition or moved by the qualified biologist.
		 To the maximum extent practicable, night-time construction activities will be minimized or avoided by the County. Because dusk and dawn are often the times when the California red-legged frog most actively moving and foraging, to the maximum extent practicable, earthmoving and other project activities will cease no less than 30 minutes before sunset and will not begin again prior to 30 minutes after sunrise. Except when necessary for driver or pedestrian safety, to the maximum extent practicable, artificial lighting at a work site will be prohibited during the hours of darkness.
		 Plastic monofilament netting (erosion control matting), loosely woven netting, or similar material in any form will not be used at the project site because California red-legged frogs can become entangled and trapped in them. Any such material found on site will be immediately removed by the qualified biologist, maintenance personnel, or County contractors. Materials utilizing fixed weaves (strands cannot move), polypropylene, polymer or other synthetic materials will not be used.
		Trenches or pits one (1) foot or deeper that are going to be left unfilled for more than forty-eight (48) hours will be securely covered with boards or other material to prevent the California red-legged frog from falling into them. If this is not possible, the County will ensure wooden ramps or other structures of suitable surface that provide adequate footing for the California red-legged frog are placed in the trench or pit to allow for their unaided escape. Auger holes or fence post holes that are greater than 0.10 inch in diameter will be immediately filled or securely covered so they do not become pitfall traps for the California red-legged frog. The qualified biologist will inspect the trenches, pits, or holes prior to their being filled to ensure there are no California red-legged frogs in them. The trench, pit, or hole also will be examined by the qualified biologist each workday morning at least one hour prior to initiation of work and in the late afternoon no more than one hour after work has ceased to ascertain whether any individuals have become trapped. If the escape ramps fail to allow the animal to escape, the qualified biologist will remove and transport it to a safe location, or contact the USFWS for guidance.
BIO-4	California Tiger Salamander Protection Measures	In the limited area in which the California tiger salamander might occur (i.e., in the vicinity of Alpine Trail), the measures described for California red-legged frog above will be implemented for California tiger salamander as well. In addition, the CDFW will be included in any agency coordination, as well as the USFWS, for issues involving the salamander.
BIO-5	San Francisco Garter Snake Protection Measures	In areas within one mile of a documented occurrence of the San Francisco garter snake, onsite habitat shall be evaluated by a qualified biologist or biological monitor for the potential to support this species. If suitable habitat for San Francisco garter snake is determined to exist in or around the work area where ground disturbing activities or mowing are planned to occur, the following measures will be followed: • To the extent feasible, maintenance activities should be conducted from April through October during the dry season
		 when these semi-aquatic species are less likely to be found in a work area. Prior to implementation of maintenance work, the County will submit to the USFWS and CDFW for its review and approval the qualifications of proposed wildlife biologist(s) who will perform pre-activity surveys and on-site
		 monitoring. To avoid harassment, injury, death, and harm to individual San Francisco garter snakes, immediately prior to (i.e., the day of) the initiation of maintenance activities that have potential for take of the San Francisco garter snake, a USFWS and CDFW-approved biologist will conduct daytime surveys throughout the project site. The approved biologist will be present during initial ground-disturbing activities (i.e., clearing and grubbing) within 250 ft of the work area to monitor for individual garter snakes. The biologist will also be present during any other maintenance activities that could potentially result in take, as determined by the biologist taking into account all information gathered during the desktop audit of the site as well as the preconstruction survey. If a San Francisco garter snake is observed within the maintenance work area, either during the pre-activity survey or at any time, activities that could potentially harm the individual will cease and the USFWS and CDFW will be contacted immediately. Work will not re-commence without written approval from CDFW. The on-site biologist will be the contact for any employee or contractor who might inadvertently kill or injure a garter snake or anyone who finds a dead, injured, or entrapped San Francisco garter snake. The on-site biologist shall possess a working cellular telephone whose number shall be provided to the USFWS and CDFW.

BMP Number	BMP Title	BMP Description
		 For vegetation removal on berms or other sites with suitable San Francisco garter snake habitat, vegetation shall be cut down to 3 inches by handtools (weedwhacker, etc.). Once the ground is visible, a visual survey for San Francisco garter snakes shall be conducted. If no sensitive species are found in the area, removal of vegetation may continue by mowing or mechanized equipment very slowly with a biological monitor walking in front of the equipment to observe. Maintenance-related vehicles will observe a 20 mile per hour speed limit while in the work area.
		 San Francisco garter snakes may be attracted to structures that provide cavities such as pipes; therefore, all pipes, culverts, or similar structures that are stored at the site for one or more overnight periods will be either securely capped prior to storage or thoroughly inspected by the on-site biologist and/or the maintenance foreman/manager before the pipe is buried, capped, or otherwise used or moved. If a San Francisco garter snake is discovered inside a pipe, the biologist (or a member of the maintenance crew, if the biologist is not on-site) will watch the individual until it has moved out of the maintenance work area.
		 A litter control program will be instituted at each activity site. All workers will ensure their food scraps, paper wrappers, food containers, cans, bottles, and other trash are deposited in covered or closed trash containers. The trash containers will be removed from the site at the end of each working day.
BIO-6	Measures to Protect the Foothill Yellow- legged Frog, California Giant	In areas within one mile of documented foothill yellow-legged frog, California giant salamander, Santa Cruz black salamander, or western pond turtle occurrences, or where suitable habitat for one or more of these species is determined to exist in or around the work area where ground disturbing activities or mowing are planned to occur, the County will implement applicable protection measures as follows:
	Salamander, and Western Pond Turtle	 The qualified biologist will conduct a special-status species survey on each morning of and within 48 hours prior to the scheduled work commencing. If no foothill yellow-legged frog, California giant Salamander, Santa Cruz black salamander, or western pond turtle
		 In the toothin yellow legged trog, california grant satantaiter, santa croz black satantaiter, of western point three is found, the work may proceed. If eggs or larvae of the foothill yellow-legged frog, California giant salamander, Santa Croz black salamander, are found, the qualified biologist will establish a buffer around the location of the eggs/larvae and work may proceed outside of the buffer zone. No work will occur within the buffer zone. Work within the buffer zone will be rescheduled until the time that eggs have hatched and/or larvae have metamorphosed, or the Permittee shall contact CDFW to develop site appropriate avoidance and minimization measures.
		3. If an active western pond turtle nest is detected within the activity area, a 10-foot buffer zone around the nest will be established and maintained during the breeding and nesting season (April 1 – August 31). The buffer zone will remain in place until the young have left the nest, as determined by a qualified biologist.
		If adult or non-larval juvenile foothill yellow-legged frogs, California giant salamanders, Santa Cruz black salamanders, or western pond turtles are found, one of the following two procedures will be implemented:
		a. If, in the opinion of the qualified biologist, capture and removal of the individual to a safe place outside of the work area is less likely to result in adverse effects than leaving the individual in place and rescheduling the work (e.g., if the species could potentially hide and be missed during a follow-up survey), the individual will be captured and relocated by a qualified biologist to suitable habitat at least 100 m away and work may proceed.
		b. If, in the opinion of the qualified biologist, the individual is likely to leave the work area on its own, and work can be feasibly rescheduled, a buffer will be established around the location of the individual(s) and work may proceed outside of the buffer zone. No work will occur within the buffer zone until the turtle has left the work area. Work within the buffer zone will be rescheduled if necessary.
BIO-7	Check for Wildlife in Pipes/Construction Materials	For maintenance activities that involve pipes or culverts, the County will visually check all sections of pipe for the presence of wildlife sheltering within them prior to moving any pipe or culvert sections that have been stored on the site overnight, or the pipes will have the ends capped while stored on site so as to prevent wildlife from entering. After attachment of the pipe/culvert sections to one another, the exposed end(s) of the pipe/culvert will be capped at the end of each day during construction to prevent wildlife from entering and being trapped within the pipeline/culvert.
BIO-8	Minimize Impacts on Dusky-footed Woodrat Nests	 If suitable habitat for San Francisco dusky-footed woodrat is determined to exist in the work area, the following measure will be followed: No more than two weeks prior to the beginning of ground disturbance or other routine maintenance activities that could disturb woodrat nests, a qualified biologist will survey the work areas scheduled for maintenance. If any dusky-footed woodrat nests are found, the nests shall be flagged and construction fencing or flagging that will not impede the movement of the SFDW shall be placed around the nest to create a 10-foot buffer (where feasible). If the nest is located adjacent to a road or trail, the nest shall be clearly flagged so equipment/truck drivers accessing sites can see the nest. If a dusky-footed woodrat nest is identified in a work area, the following measure will be implemented by the County. The County will avoid physical disturbance of the nest if feasible. Ideally, a minimum 10-foot buffer should be maintained between maintenance construction activities and each nest to avoid disturbance. In some situations, a smaller buffer may be allowed if in the opinion of a qualified biologist removing the nest would be a greater impact than that anticipated as a result of maintenance activities.
		 If a dusky-footed woodrat nest cannot be avoided and the nest is located in urban or bayside areas where woodrat populations are small and isolated from larger populations, the County will consult with CDFW regarding the appropriate measures to minimize impacts. If a dusky-footed woodrat nest cannot be avoided and the nest is located in more rural or natural areas and/or where woodrat populations are large and have connectivity to large populations, one of the following two relocation

BMP Number	BMP Title	BMP Description
		 If the woodrat nest site and the proposed relocation area are connected by suitable dispersal habitat for the woodrat, as determined by a qualified biologist, the following relocation methodology will be used: Prior to the beginning of construction activities, a qualified biologist will disturb the woodrat nest to the degree that all woodrats leave the nest and seek refuge outside of the maintenance activity area. Relocations efforts will avoid the nesting season (February - July) to the maximum extent feasible. Disturbance of the woodrat nest will be initiated no earlier than one hour before dusk to minimize the exposure of woodrats to diurnal predators. Subsequently, the biologist will dismantle and relocate the nest material by hand. All material from dismantled nests will be placed in a pile, preferably against a log or tree trunk, in suitable habitat located at least 20 feet from, but otherwise as close as possible to, the original nest locations, to provide material for woodrats to construct new nests. During the deconstruction process, the biologist will attempt to assess if there are juveniles in the nest. If immobile juveniles are observed, the deconstruction process will be discontinued until a time whe the biologist believes the juveniles are mobile. The nest may be dismantled once the biologist has determined that adverse impacts on the juveniles would not occur. All disturbances to woodrat nests will be documented in construction monitoring report and submitted to CDFW. If a qualified biologist determines that the woodrat relocation area is separated from the nest site by major
		impediments, or a complete barrier, to woodrat movement, trapping for woodrats will be conducted prior to relocation of nest material. Prior to the start of nest relocation activities, artificial pine box shelters will be placed at each of the sites selected for relocation of nest materials. The dimensions of the artificial shelters will be approximately 8" long x 8" wide x 6" high. Each shelter will include two interior chambers connected by an opening. At the relocation sites, the artificial pine box shelters will provide basement structures for the relocated woodrat nest materials, allowing woodrats to enter, use, and modify the relocated nests.
		A qualified biologist will set two traps around each of the woodrat nests to be relocated. Traps will be set within one hour prior to sunset, and baited with a mixture of peanut butter, oats, and apples. Traps will also be equipped with cotton bedding and covered with cardboard. The traps will be checked the following morning, within one-and-a-half hours of sunrise. If a woodrat is captured it will be placed in a quiet area while its nest material is relocated; the animal will then be released at the relocated nest. If no woodrats are captured after the first night, the biologist will set the traps for one additional evening to increase the probability of capturing the animal and ensuring a safe relocation. If no woodrats are captured at a given house after two nights, it will be assumed that the house is not currently occupied.
		Trapping will only be conducted outside the breeding season, which for woodrats is from February through the end of July If a litter of young is found or suspected while dismantling a nest for relocation, the nest material will be replaced, any tranned woodrats will be returned to the nest, and the nest will be left alone for 2 to 3 weeks, after which time the nest would be rechecked to verify that the young are capable of independent survival, as determined by the lead woodrat biologist, before proceeding with nest dismantling.
BIO-9	Measures to Protect Nesting Migratory Birds	 To the extent possible, conduct vegetation removal activities prior to nesting bird season (February 1 through August 31). For maintenance activities or tree removal that are scheduled to occur between February 1 and August 31, a qualifier biologist will survey the work area and a minimum of 300 feet surrounding the work area for raptor nests and 100 feet surrounding the work area for raptor n
		for nests of non-raptors. This survey will occur no more than three days prior to starting work. If a lapse in maintenance-related work of 7 days or longer occurs, another focused survey will be conducted before maintenance work can be reinitiated.
		 If nesting birds are found, a no-work buffer will be established around the nest and maintained until the young have fledged. A qualified biologist will identify an appropriate buffer based on a site specific-evaluation. Typical appropriat buffers are 300 feet for raptors, herons, and egrets (though larger for bald and golden eagles, as discussed in BIO-14) 100 feet for non-raptors nesting on trees, shrubs and structures, and 25 feet for ground-nesting non-raptors.
		 The boundary of each buffer zone will be marked with fencing, flagging, or other easily identifiable marking if work will occur immediately outside the buffer zone.
		 Install physical barriers to nesting where appropriate (e.g., install netting over entryways to cavities, bridge ledges, culverts) and check regularly for any trapped birds. Work will not commence within the buffer until fledglings are full mobile and no longer reliant upon the nest or parental care for survival.
		 No trees or shrubs shall be disturbed that contain active bird nests until all eggs have hatched, and young have fully fledged (are no longer being fed by the adults and have completely left the nest site). To avoid potential impacts to tree or shrub-nesting birds, any project-specific trimming or pruning of trees or shrubs shall be conducted during the time period of September 1 to February 14 unless a preconstruction nesting bird survey has been conducted by a qualified biologist. No habitat removal or modification shall occur within the Ecologically Sensitive Area fenced nest zone even if the nest continues to be active beyond the typical nesting season for the species, until the young have fully fledged and will no longer be adversely affected by the project.
		 Within areas subject to CDFW regulation under Section 1600 of the Fish and Game Code, nesting bird protection measures required as conditions of the Streambed Alteration Agreement will be implemented.
BIO-10	Measures to Protect Nesting Marbled Murrelet	 During marbled murrelet breeding/nesting season (March 24 to September 15), if suitable marbled murrelet nesting trees are present within 300 feet of the project area or if a marbled murrelet nest is detected, Permittee shall consult with CDFW before proceeding. If habitat trees are present within ¼- mile of the project site but are greater than 300 feet from the work area, Permittee may proceed with the following conditions:

BMP Number	BMP Title	BMP Description
		 If activities cannot be performed during this window and would thus occur during the marbled murrelet breeding season (March 25 to September 15), seasonal disturbance minimization buffers as listed the USFWS document, <i>Estimation of the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and</i> <i>Marbled Murrelets in Northwestern California</i> (2006) shall be followed. Permittee shall measure ambient noise and estimate construction activity noise to calculate seasonal buffer widths using that reference. Alternatively, if protocol-level surveys are conducted and do not indicate that the habitat is occupied by marbled murrelet, seasonal and distance work restrictions may be lifted with written approval from CDFW. Protocol level survey procedures and information can be found at: <u>http://www.pacificseabirdgroup.org/publications/PSG_TechPub2_MAMU_ISP.pdf</u>
BIO-11	Non-native Aquatic Plant Removal	Any aquatic non-native plants found while performing maintenance activities will be disposed of properly and will not be placed back into the tributaries where work is being conducted or any other drainages, creeks, or streams.
BIO-12	Measures to Protect Special-Status Butterflies	 If suitable habitat for Bay checkerspot, Mission blue, San Bruno elfin, or Callippe silverspot butterflies is determined to exist in or around the work area where ground disturbing activities are planned to occur, the County will implement applicable protection measures as follows: Areas supporting larval host plants for the Bay checkerspot, Mission blue, San Bruno elfin, or Callippe silverspot will be identified by a qualified biologist and protected from disturbance by establishing buffer zones around individual plants or populations. The size of the buffer will be determined by a qualified botanist; the actual distance will depend on the plant species potentially affected and the type of disturbance. If impacts on larval host plants of federally listed butterflies are unavoidable and are within occupied or potentially occupied habitats, then the County will stop work in the vicinity of the host plant(s) and consult with the USFWS.
		 No herbicide will be applied to the buffer area, and to the extent feasible, maintenance personnel and equipment will not operate within such areas.
		 If, based on a review of current California Natural Diversity Database (CNDDB) records or the latest information available from the Xerces Society (https://xerces.org/state-of-the-monarch-butterfly-overwintering-sites-in-california/) historically or currently occupied overwintering habitat for the monarch butterfly is determined to exist in or adjacent to the work area where ground disturbing activities are planned to occur, the County will implement applicable protection measures as follows: Areas supporting overwintering habitat for the monarch butterfly will be identified by a qualified biologist and maintenance activities during fall and winter months when monarch butterflies are present will be avoided to the
		extent practicable. Historically or currently occupied trees/groves will be protected from disturbance by the establishment of a 100-foot
		buffer zone around the tree/grove. The buffer will be measured from the outside edge of the dripline of the monarch
		 grove. If maintenance activities within 100 feet of a historically or currently occupied tree/grove are unavoidable, the County will prepare and implement an impact minimization plan in consultation with the USFWS. No herbicides or pesticides will be applied to the buffer area, and to the extent feasible, maintenance personnel and
		equipment will not operate within such areas.
BIO-13	Measures to Protect the California Ridgway's Rail	suitable breeding habitat for California Ridgway's rails is determined to exist in or around the work area where maintenance activities are planned to occur, the County will implement applicable protection measures as follows:
		 If work will occur during the Ridgway's rail breeding season (February 1 through August 31), the County will conduct pre-activity surveys for the Ridgway's rail in the late winter and early spring of the year maintenance activities are scheduled to occur. Surveys will be conducted per the current USFWS protocol.
		 If the surveys confirm there are no breeding rails within 700 feet of the project area, or the area where heavy equipment, ground disturbance, or vegetation removal would occur, work activities may proceed during the breeding season.
		 If surveys identify the presence of breeding rails, no maintenance activities will occur within 700 feet of occupied nesting habitat during the breeding season (February 1 to August 31).
		For work occurring within 300 feet of potential nonbreeding habitat for California Ridgway's rails which provides habitat that occasional nonbreeding California Ridgway's rails may use for foraging or cover, or other identified suitable California Ridgway's rail habitat locations, the County will implement applicable protection measures as follows:
		 Prior to the initiation of work each day, if suitable habitat occurs within the immediate work area, a qualified biologist will conduct a preconstruction survey of all suitable habitat that may be directly or indirectly impacted by the day's activities (work area, access routes, staging areas). Specific habitat areas are vegetated areas of cordgrass (Spartina spp.), marsh gumplant (Grindelia spp.), pickleweed (Salicornia pacifica), alkali heath, (Frankenia sp.), and other high marsh vegetation, brackish marsh reaches of creek with heavy accumulations of bulrush thatch (old stands), and high water refugia habitat that may include annual grasses, and shrubs immediately adjacent to channels.
		 If during the initial daily survey or during work activities a Ridgway's rail is observed within or immediately adjacent to the work area (50 feet), initiation of work will be delayed until the Ridgway's rail leaves the work area.
		 Mowing using heavy equipment (e.g., tractors, boom mowers, or rider mowers) will not be conducted in habitat areas or within 50 feet of habitat areas. If mowing with hand equipment is necessary within 50 feet of habitat areas, an on- site monitor will observe the area in front of the mower from a safe vantage point while it is in operation. If Ridgway's rails are detected within the area to be mown, the mowing will stop until the individual(s) have left the work area.
		 If visual observation cannot confirm the Ridgway's rail(s) left the work area, then it is assumed that the individual(s) remains in the work area and the work will not resume until the area has been thoroughly surveyed (and absence confirmed) or the USFWS has been contacted for guidance.

BMP Number	BMP Title	BMP Description
BIO-14	Measures to Protect Bat Colonies	 If high-quality habitat for roosting bats (i.e., large trees with cavities of sufficient size to support roosting bats, or buildings providing suitable roost sites, as determined by a qualified bat biologist) is present within 100 feet of a maintenance site, a qualified bat biologist will conduct a survey to look for evidence of bat use within two weeks prior to the onset of work activities. If evidence of bat occupancy is observed, or if high-quality roost sites are present in areas where evidence of bat use might not be detectable (such as a tree cavity), an evening survey and/or nocturnal acoustic survey may be necessary to determine if a bat colony is present and to identify the specific location of the bat colony. If no active maternity colony or non-breeding bat roost is located, project work can continue as planned. If an active maternity colony or non-breeding bat roost is located, the project work will be redesigned to avoid disturbance of the roosts, if feasible. If an active maternity colony is located, and the project cannot be redesigned to avoid removal or disturbance of the occupied tree or structure, disturbance will not take place during the maternity season (March 15 – July 31), and a disturbance-free buffer zone (determined by a qualified bat biologist) will be observed during this period. If an active non-breeding bat roost is located, and the project cannot be redesigned to avoid removal or disturbance of the occupied tree or structure, disturbance will not take place during the asternity season (March 15 – July 31), and a disturbance-free buffer zone (determined by a qualified bat biologist) will be observed during this period.
		February 15 and March 15 (as determined by a Memorandum of Understanding with CDFW). Bats may be evicted through exclusion after notifying CDFW. Trees with roosts that need to be removed will first be disturbed at dusk, just prior to removal that same evening, to allow bats to escape during the darker hours.
BIO-15	Nesting Bald Eagle and Golden Eagle	In areas within 0.5 mile of known bald or golden eagle nesting areas, the following measures will be implemented:
	Avoidance	 To the extent feasible, conduct vegetation removal activities prior to the nesting season (January 15 through August 1).
		 For maintenance activities or tree removal that are scheduled to occur between January 15 and August 1, a qualified biologist will survey the work area and a minimum 0.5 mile surrounding the work area for eagle nests. This survey will occur no more than seven days prior to starting work.
		No maintenance activities will occur within a 0.5-mile viewshed buffer zone (areas that can be seen by an eagle on the nest), around any active eagle nest during the breeding season, unless a qualified biologist determines late in the season that nesting activity has been completed for the year. No breeding-season maintenance activities will occur within 0.25 mile of the nest site a, regardless of whether or not those activities can be seen from the nest, while nesting activity is occurring.
BIO-16	Avoid Special-Status Plant Species	 For projects located in areas where special-status plants have been identified as potentially occurring (see Table 4-1), a qualified biologist will assess habitat suitability for the potential occurrence of special-status plant species within the work area. If determined to be warranted, a qualified botanist will conduct appropriately timed surveys for the focal plant species in accordance with CDFW's special-status plant survey methodology. If a special-status species is observed in or near the project site, the County will follow the measures below as well as any additional measures that might be contained in the forthcoming Biological Opinion issued by the USFWS for the Maintenance Program.
		 If discovered, the population size and occupied area of special-status plant populations identified during the field survey, and with potential to be impacted, will be estimated. A "population" will be defined as the group of individuals of a species present within a 0.10-mile radius. In addition, the population will be photographed and flagged to maximize avoidance, as well as to estimate the percentage of the population affected. If feasible, the project shall be redesigned or modified to avoid direct and indirect impacts on special-status plant species.
		Special-status plants to be avoided will be protected from disturbance by installing environmentally sensitive area fencing (orange construction barrier fencing or a suitable alternative). Protective fencing will be installed under the direction of a qualified biologist as necessary to protect the plant and its habitat; where feasible, the environmentally sensitive area fencing will be installed at least 50 ft from the edge of the population. The location of the fencing will be shown on the maintenance design drawings and marked in the field with stakes and/or flagging. The design specifications will contain clear language that prohibits maintenance-relate activities, vehicle operation, material and equipment storage, and other surface disturbing activities within the fenced environmentally sensitive area. For non-ground disturbing vegetation management activities conducted using only hand-held equipment, the non-disturbance buffer may be reduced to a minimum of 3 feet and flagging of the population may be used in place of environmentally sensitive fencing.
		 Vegetation management activities in sensitive plant areas will be conducted under the guidance of a qualified botanist. These activities will be timed following the blooming periods of potentially occurring listed species.
		 If any impacts to individual state-listed plants are unavoidable, or if more than 5 percent of a population of a federally listed plant species or species with California Rare Plant Ranks of 1 or 2 would be impacted percent, then the County will stop work in the vicinity of the plant(s) and consult with the appropriate regulatory agencies.
		 If impacts to state or federally listed plants are unavoidable and less than 5 percent of a population would be impacted, prior to any ground-disturbing activities the County will preserve the seedbank within the impact area by removing and retaining the topsoil prior to the implementation of maintenance activities. Following completion of the maintenance activity, the County will monitor the impact area for two years. Any non-native invasive plant species occurring within this area during the monitoring period will be removed under the supervision of a qualified biologist.
		 If appropriately timed focused botanical surveys cannot be conducted prior to maintenance activities in areas identified by a qualified biologist as potentially supporting listed plants, then the County will assume presence of the plant species in question.

BMP Number	BMP Title	BMP Description
BIO-17	Sudden Oak Death Controls	 Before entering maintenance sites located in areas infested with <i>Phytophthora</i>, field workers will receive training that includes information on <i>Phytophthora</i> pathogens and how to prevent the spread of these and other soil-borne organisms by following approved phytosanitary procedures.
		 The exterior and interior of all vehicles, construction equipment, and tools should be clean and free of debris, soil and mud (including mud on tires, treads, wheel wells and undercarriage) prior to arrival at a new job site, especially during the wet season.
		 Work shoes should be kept clean by inspecting shoe soles and removing mud, debris and soil off treads before moving to a new job site.
		 Do not collect or transport host plants from an infested or quarantined area.
		 Vehicles should stay on established roads whenever possible. To minimize the potential for spreading potentially contaminated soil and time required for decontamination, if possible, avoid vehicle traffic and field work when soils are wet enough to stick readily to shoes, tools, equipment and tires.
		 Delivered nursery plants that will be held before planting will be transferred to cleaned and sanitized raised benches and maintained in accordance with the "Guidelines to Minimize Phytophthora Pathogens for holding (non-production) nurseries at restoration sites, Section 3."
	0	 A portion of purchased nursery plants will be tested for <i>Phytophthora</i> using the pear-baiting methodology in which pear baits are placed in soil samples, water samples and root samples of nursery purchased plants. Incubation temperatures with diurnal fluctuations from 21 degrees Celsius to 27 degrees Celsius are generally suitable for detecting <i>Phytophthora</i> species using pear baits. If dark lesions appear on pears, the sample likely has <i>Phytophthora</i> inoculum. For additional information for the pear-baiting methodology, see: phytosphere.com/BMPsnursery/test3_2bait.htm
		Nursery plants will be transported on or in vehicles or equipment that have been cleaned before loading the stock.
		 Nursery stock will not be placed on the soil or other potentially contaminated surfaces until they are placed at their specific planting sites.
		 Minimize unnecessary movement of soil and plant material within a planting area, especially from higher to lower risk areas.
		 On-site or off-site collection of plant materials, including seed and cuttings for direct planting, will be conducted in a phytosanitary manner. Only uncontaminated water or water that has been effectively treated to remove or kill <i>Phytophthora</i> should be used for
1.1		rinsing or irrigating plant material.
BIO-18	Invasive Plant Control	 In order to minimize the spread of invasive plants, all equipment (including personal gear) will be cleaned of soil, seeds, and plant material prior to arriving on the project site to prevent introduction of undesirable plant species.
		Prior to implementation of Program activities at a given site, the proposed staging area, as well as any areas to be graded, will be surveyed for the presence of invasive weed species. Invasive weed species occurring within locations of construction clearing and grubbing shall be flagged for removal by the biological monitor or qualified biologist. Any invasive weeds with a Cal-IPC rating of "moderate" or "high" found within the survey area will be removed and disposed of in a sanitary landfill, incinerated off-site, or disposed in a high-temperature composting facility that can compost using methods known to kill weed seeds, taking care to prevent any seed dispersal during the process by bagging material or covering trucks transporting such material from the site.
		 Suitable onsite disposal areas should be identified to prevent the spread of weed seeds. Invasive plant material should be rendered nonviable (partially decomposed, very slimy or brittle) when being treated onsite. Maintenance staff shall desiccate or decompose invasive plant material until it is nonviable. Depending on the type of plant, disposed plant material can be left out in the open as long as roots are not in contact with moist soil, or can be covered with a tarp to prevent material from blowing or washing away. Permittee shall monitor all sites where invasive plant material is disposed onsite and treat any newly emerged invasive plants. Invasive plant material removed during work activities shall be bagged and appropriately incinerated or disposed of in a landfill or permitted composting facility.
		 No invasive plants shall be planted at maintenance work areas. Prohibited exotic plant species include those identified in the California Invasive Plant Council's Inventory Database, which is accessible at: https://www.cal- ipc.org/plants/inventory/.
BIO-19	Restore Channel Features	Following completion of bank stabilization activities, any temporary modifications to the low-flow channels will be reversed so that the channel is contoured to facilitate fish passage at least as well following the activity as it did prior to the stabilization activity.
BIO-20	Avoidance of Mammal Pupping Sites	Work within 250 feet of an active harbor seal or sea lion haul out will be conducted outside of the pupping season (i.e., June – February).
BIO-21	General Wildlife Protection Measures	If any wildlife is encountered during project activities, said wildlife shall be allowed to leave the area unharmed and on their own volition, except in cases where relocation by a qualified biologist is permitted by conditions below.
BIO-22	Measures to Protect Nesting Western	 To the extent feasible, maintenance activities within 600 feet of suitable snowy plover breeding habitat will occur outside the plover breeding season of March 1 through September 14.
	Snowy Plover	 If maintenance activities are scheduled to occur within 600 feet of suitable snowy plover breeding habitat during the nesting season (March 1 through September 14), a pre-activity survey will be conducted by a qualified biologist within 7 days prior to the start of the activity to determine whether active nests are present.

BMP Number	BMP Title	BMP Description
		 If an active snowy plover nest is detected within 600 feet of maintenance areas, the qualified biologist, in coordination with USFWS personnel, will determine an appropriate buffer that should remain free from new activities (i.e., those that were not ongoing when the nest was established). The buffer will be determined taking into account visual barriers (such as dunes) between the activities and the nest and the level and proximity of human activity around the nest when it was established. The buffer will remain in place until the nest is no longer active.
		 If broods of unfledged snowy plover young are present, no maintenance activities will occur within 300 feet (or as otherwise determined by a qualified biologist in coordination with the USFWS) of a brood.
BIO-23	Burn Pile Measures	The County would coordinate burn pile activities with CAL FIRE.
	111111	 Burning will only occur on days when danger of wildfire is low (e.g., it will not occur on windy days or in very hot, dry conditions).
		 No burn piles will be located within 200 feet of known occurrences of special-status plants, suitable habitat for special-status butterflies and their hostplants, or high-quality aquatic or wetland habitat for the California red-legged frog, California tiger salamander, or San Francisco garter snake.
		 Prior to the initiation of burning, the burn pile will be physically disturbed (e.g., with a stick or shovel) to encourage any animals taking refuge within the pile to move out of the pile.
BIO-24	Pathogen Control	 In order to minimize the spread of plant and animal pathogens, all equipment (including personal gear such as boots) will be cleaned of soil, seeds, and plant material prior to arriving on a maintenance site. All organic matter will be removed from nets, traps, boots, vehicle tires and all other surfaces that have come into contact with water or potentially contaminated sediments.
		 Equipment, including maintenance equipment and field gear used to capture and relocate special-status species such as frogs, will be disinfected after exiting one aquatic habitat and before entering the next aquatic habitat, unless the waters are hydrologically connected to one another. Cleaning equipment in the immediate vicinity of aquatic habitats will be avoided (e.g., clean in an area at least 100 feet from aquatic features).
		 Boots, nets, gloves, and any other equipment used to handle amphibians or aquatic organisms will be scrubbed with a bleach solution (0.5 to 1.0 cup per 1.0 gallon of water), Quat-128™ (1:60), or a 3 to 6 percent sodium hypochlorite solution and thoroughly rinsed clean with water between maintenance sites. Care will be taken so that all traces of the disinfectant are removed before entering the next aquatic habitat.
		 When working at sites with known or suspected disease problems, disposable gloves will be worn and changed between handling each animal. Gloves will be wetted with water from the site or distilled water prior to handling any amphibians. Gloves will be removed by turning inside out with hands cleaned using a hand cleaner and water rinse to minimize cross-contamination.

ATTACHMENT

BMP Number	BMP Title	BMP Description
CUL-1	Review Cultural Resources Sensitivity Map Data and County Baseline Maps to Determine if	 During the early phases of Annual Work Plan development, the County will review the Cultural Sensitivity Map Data and County Baseline Maps (Appendix I) for all locations where ground-disturbing activities are proposed where excavation would be required beyond the facility's as-built design or otherwise reach previously undisturbed soils beyond existing engineered depths or extent. If the foregoing conditions are not applicable to the maintenance activity being performed, only BMPs CUL-4 and CUL-5 will be required.
	the Work Area Has Been Subject to a	Based on the location of projects, and whether or not excavation or ground disturbance will occur beyond existing engineered depths or extent, BMPs CUL-2 through CUL-4 shall be implemented as follows:
	Previous Cultural Resource Study	 High Sensitivity: BMPs CUL-2, CUL-3, and CUL-4
	Resource study	Moderate Sensitivity: BMP CUL-2 and CUL-3
		 Low Sensitivity: BMPs CUL-2 through CUL-4 not required
		 Unknown Sensitivity: BMP CUL-2 and CUL-3
		 BMPs CUL-5 and CUL-6 are applicable to all ground-disturbing activities in natural channels or native soils, regardless of the sensitivity level of the work area.
CUL-2	Record Search and Field Inventory for Highly or Moderately	 The County will retain a qualified cultural resources specialist to conduct a review and evaluation of locations that involve soil disturbance/excavation in natural channels or native soils identified as Highly to Moderately Sensitive to determine the potential for these activities to affect significant cultural resources.
	Sensitive Areas (Sensitivity Ratings 3- 5), and Areas of Unknown Sensitivity	 The initial evaluation will be based on a review of archival information provided by the Northwest Information Center (NWIC) of the California Historical Resources Information System in regard to the project area based on a 0.25-mile search radius. This initial archival review will be completed by the professional archaeologist who will be able to view confidential site location data and literature to arrive at a preliminary sensitivity determination.
		 It is recommended that the County conduct a review of the Sacred Lands Inventory of the Native American Heritage Commission (NAHC) and due diligence outreach with individuals identified by the NAHC and/or local historical societies or groups. This outreach would involve sending a letter with a request for pertinent information about cultural resources within the project area and to identify any concerns. This outreach is in addition to notification under PRC 21080.3.1 (i.e., CUL-3), and may be appropriate for projects that would not otherwise require Assembly Bill 52 notification. Such outreach is also encouraged under Section 106 implementing regulations at 36 CFR 800.4(a)(3) for identification of historic properties.
		 The qualified archaeologist will conduct field inventory of the project area to determine the presence/absence of surface cultural materials. The results, along with any mitigation and/or management recommendations, will be presented to the County in an appropriate report format that includes any necessary maps, figures, and
		correspondence with interested parties. The report will also include a summary of the records search and archival research data, and pertinent geoarchaeological overviews and studies, and regional research designs, as appropriate.
		 A summary table indicating appropriate management actions (e.g., monitoring during construction, presence/absence testing for subsurface resources, and data recovery) will be developed for each project work area reviewed.
	0	The maintenance activities will be implemented to avoid significant impacts to cultural resources, if possible.
		 EXCEPTIONS: After the NWIC record search and NAHC sacred lands search have been conducted, the qualified archaeologist may determine that a field review is not necessary under the following circumstances:
		 Locales that have previously been subject to cultural resource studies where no previously identified cultural resources or historical resources were documented.
		 Locales that have previously been subject to cultural resources studies, but identified cultural resources have been determined by a qualified archaeologist/resource specialist as not eligible for listing in the California Register of Historical Resources (CRHR) or the National Register of Historic Places (NRHP).
		 A short report would be required to document the decision not to conduct a field study.
CUL-3	Consult with Native American Tribes	 The County, as the lead CEQA agency, has notified Native American tribes about the Maintenance Program according to PRC 21080.3.1 (also referred to as Assembly Bill 52); only Native American tribes that have previously requested notification from the County pursuant to PRC 21080.3.1(b) require notification. For tribes that request consultation under PRC 21080.3.1(b)(2), the County will consult with those tribes pursuant to PRC 21080.3.2 for projects in areas of high, moderate, and unknown sensitivity.
CUL-4	Construction Monitoring	 The County will retain a qualified archaeologist to be present on-site during ground-disturbing activities within areas identified as highly sensitive for cultural areas, unless the qualified archaeologist determines otherwise after the field inventory conducted under CUL-2. Similarly, after conducting the field study under CUL-2, the qualified archaeologist may determine that areas originally identified as moderately sensitive for cultural resources warrant monitoring during construction. The reasons for conducting monitoring in areas initially considered of moderate sensitivity would be discussed in the inventory report.
		 The qualified archaeologist will have the authority to stop work if cultural resources are discovered. If any cultural resources are discovered during construction monitoring, BMP CUL-6 would be implemented as appropriate.
CUL-5	Conduct Pre-	At the beginning of each maintenance season, and in concert with implementing BMP BIO-1, as well as before conducting
	Maintenance Educational Training	activities subject to BMP CUL-2 through CUL-4, all maintenance personnel will participate in an educational training session conducted by a qualified cultural resources specialist. This training will include instruction on how to identify

BMP Number	BMP Title	BMP Description
		historic and prehistoric resources that may be encountered, and will describe the appropriate protocol to be followed if resources are discovered during maintenance work.
CUL-6	Address Discovery of Cultural Remains or Historic or Paleontological Artifacts Appropriately	Unanticipated discoveries of cultural and paleontological resources may occur during maintenance construction activities. Examples of cultural remains are obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or significant areas of tool-making debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period artifacts may include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. Paleontological artifacts are fossilized remains of plants and animals.
		Work will be restricted or stopped in areas where remains or artifacts are found until proper protocols are met. Protocol for treatment of prehistoric or historic cultural resources:
		Work at the location of the find will halt immediately within 50 feet of the find. A "no work" zone will be established utilizing appropriate flagging to delineate the boundary of this zone, which will measure at least 50 feet in all directions from the find.
		The County will retain the services of a consulting archaeologist, who will visit the discovery site as soon as practicable and perform minor hand excavation to describe the archaeological or paleontological resources present and assess the amount of disturbance.
		3. The consulting archaeologist will provide to the County and USACE, at a minimum, written and digital-photographic documentation of all observed materials, utilizing the CRHR and NRHP guidelines for evaluating archaeological resources. Based on the assessment, the County and USACE will identify the CEQA and Section 106 cultural resources compliance procedures to be implemented.
		4. If the consulting archaeologist determines that the find appears not to meet the CRHR or NRHP criteria of significance, and a USACE archaeologist concurs with the consulting archaeologist's conclusions, construction may continue while monitored by the consulting archaeologist. The authorized maintenance work will resume at the discovery site only after the County has retained a consulting archaeologist to monitor and the Maintenance Manager has received notification from USACE allowing work to continue.
		If the find appears significant, avoidance of additional impacts is the preferred alternative. The consulting archaeologist will determine if adverse impacts to the resources can be avoided.
		6. Where avoidance is not practical (e.g., maintenance activities cannot be deferred or must be completed to satisfy the Maintenance Program objective), the County will develop an action plan (also known as a data recovery plan) and submit it to USACE within 48 hours of determining that maintenance activities cannot be deferred. The action plan will be submitted by email to the appropriate archeological/cultural resources contact at the USACE. The action plan is equivalent to a data recovery plan. It will be prepared in accordance with the current professional standards and state guidelines for reporting the results of the work, and will describe the services of a Native American consultant and a proposal for curation of cultural materials recovered from a non-grave context.
		The recovery effort will be documented in a report prepared by the consulting archaeologist in accordance with current archaeological standards. Any non-grave artifacts will be placed with an appropriate repository.
		 In the event of discovery of human remains (or if a find consists of bones suspected to be human), the field crew supervisor will take immediate steps to secure and protect such remains from vandalism during periods when work crews are absent.)
		9. The maintenance crew supervisor will immediately notify the San Mateo County Coroner and provide any information that identifies the remains as Native American. If the remains are determined to be those of a prehistoric Native American or a Native American from the ethnographic period, the Coroner will contact NAHC within 24 hours of being notified about the remains. NAHC will designate and notify a Most Likely Descendant (MLD) within 24 hours. The MLD will have 24 hours to consult and provide recommendations for the treatment or disposition, with proper dignity, of the human remains and grave goods.
		10. Preservation in situ is the preferred option for human remains. Human remains will be preserved in situ if continuation of the maintenance work, as determined by the consulting archaeologist and MLD, will not cause further damage to the remains. The remains and artifacts will be documented, the find location carefully backfilled (with protective geo-fabric if desirable), and the information recorded in County Maintenance Program files.
		11. If human remains or cultural items are exposed during maintenance that cannot be protected from further damage, they will be exhumed by the consulting archaeologist at the discretion of the MLD and reburied, with the concurrence of the MLD, in a place mutually agreed upon by all parties.
		Protocol for treatment of paleontological resources:
		12. Work at the location of the find will halt immediately within 50 feet of the find. A "no work" zone will be established utilizing appropriate flagging to delineate the boundary of this zone, which will measure at least 50 feet in all directions from the find.
		 The County shall retain the services of a consulting paleontologist. The consulting paleontologist will meet the Society for Vertebrate Paleontology's criteria for a qualified professional paleontologist (Society of Vertebrate Paleontology 2010).
		 The consulting paleontologist shall visit the discovery site as soon as practicable and perform minor hand- excavation to describe the paleontological resources present and assess the amount of disturbance. The consulting paleontologist will follow the Society for Vertebrate Paleontology's guidelines (2010) for treatment of the artifact. Treatment may include preparation and recovery of fossil materials for an appropriate museum or university collection, and may include preparation of a report describing the finds. The County will be responsible
		for ensuring that the consulting paleontologist's recommendations for treatment are implemented.



Photo 1. Deteriorated corrugated metal pipe (CMP) culvert located at Pigeon Point Road that requires replacement. (March 2007)



Photo 2. Deteriorated CMP culvert on Alpine Creek that requires replacement. (August 2016)



Photo 3. George Street bridge. Sediment and vegetation removal needed in the future. Bridge could also benefit from paint removal. (December 2010)



Photo 4. Pescadero Creek Road bridge near Cloverdale Road that requires routine maintenance including scour and erosion protection improvements at the base of the abutments. (April 2017)



Photo 5. Sediment removal needed at the San Bruno Creek and Walnut Street crossing. (February 2018)



Photo 6. Sediment with vegetation growing on top of it in Belmont Creek at Old County Road. (September 2011)



Photo 7. Paved ditch downstream of Farallone Avenue and Kanoff Street in Montara. Ditch is routinely maintained with a Vac-Con truck. (May 2015)



Photo 8. LID enhancements consisting of turf reinforcement mat, native grass sod, and rock check-dams that were recently installed along Farallone Avenue in Montara. (May 2015)



Photo 9. Concrete box culvert at Cloverdale Road and Butano Cutoff Road in Pescadero. Potential need for sediment and vegetation removal in the future. (May 2015)



Photo 10. Concrete box culvert at Crystal Springs Road (near Polhemus Road) on San Mateo Creek. Potential maintenance needs include concrete patching of middle culvert wall. (May 2015)



Photo 11. Bioretention swale along Carlos Street in Moss Beach that requires periodic vegetation removal, light sediment clearing, and planting. (March 2018)



Photo 12. Bioretention swale at the Fitzgerald Marine Reserve parking lot, which requires periodic vegetation removal, light sediment clearing and revegetation. (January 2016)



Photo 13. Example of an inboard unpaved ditch along Gazos Creek Road. (December 2019)



Photo 14. Another example of an inboard unpaved ditch along Gazos Creek Road. (December 2019)



Photo 15. Example of an inboard unpaved ditch along Bean Hollow Road. (December 2019)





Photo 17. Example of an unpaved ditch along Alpine Road. (December 2019)

Photo 16. Example of an unpaved ditch and roadside culvert along Pescadero Creek Road and entrance to Sam McDonald Park. (December 2019)



Photo 18. Example of a paved ditch along Occidental Way in the Emerald Hills neighborhood. (May 2015)



Photo 1. Example slope failure above unnamed tributary to Alpine Creek. This site was addressed in the County's 2017 emergenc permit application. (March 2017)



Photo 2. Bank failure al February 2016)



Photo 3. Example slope failure along Gazos Creek and Gazos Creek Road, This site was addressed in the County's 2017 emergence permit application. (March 2017)



Photo 5. Example of soil nailing at a bank stabilization site along Alpine Road. (September 2014)



Photo 6. Example of a retaining wall at a bank stabilization site along Alpine Road. (October 2014)



Photo 7. Example of a solider pile wall fronted with rock, rootwads, and vegetation following installation at Los Trancos Rd. (November 2017)



Photo 8. Example of a solider pile wall with grown-in vegetation at Los Trancos Rd. (March 2018)



Photo 1. Vegetation that has recently been weed whacked along Stage Road in Pescadero. (May 2015)



Photo 3. Meadow near Hoffman Creek Trail in Pescadero Creek County Park that routinely gets mowed. (May 2015)



Photo 5. Fuel management area in Quarry County Park in Half Moon Bay. (May 2015)



Photo 2. Example area that underwent hazardous tree removal in La Honda Creek (near Entrada Way). Photo shows mass of soil and redwood roots in middle portion of channel. (May 2015)



Photo 4. Towne Fire Road in Pescadero Creek County Park where fuel management activities occur. (May 2015)



Photo 6. County staff conducting vegetation trimming and weed whacking activities along Weiler Ranch Trail in San Pedro Valley Park. (May 2015)