



Storm Drainage Maintenance Plan

Administrative Draft Initial Study – Mitigated Negative Declaration

prepared by

City of Monterey
580 Pacific Street
Monterey, California 93940
Contact: Elizabeth Caraker, AICP

prepared with the assistance of

Rincon Consultants, Inc.
437 Figueroa Street, Suite 203
Monterey, California 93940

April 2019



RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
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Initial Study

1. Project Title

Storm Drainage Maintenance Plan

2. Lead Agency Name and Address

City of Monterey
580 Pacific Street
Monterey, California 93940

3. Contact Person and Phone Number

Elizabeth Caraker, AICP
Housing and Community Development Manager
831-646-1739

4. Project Location

The Storm Drainage Maintenance Plan (SDMP) identifies 29 sites targeted for maintenance activities (hereafter referred to as “maintenance sites”). Of the 29 maintenance sites, 27 are located within the City of Monterey and two are located in the City of Seaside. All 29 maintenance sites are located within the surface drainage system, specifically within the channel network that conveys stormwater runoff to the Monterey Bay. These channels have been grouped according to the larger drainage basins in which they are located. Each maintenance site consists of a drainage channel and associated culvert or a detention basin for stormwater. Descriptions of each maintenance site are presented in Table 1 below. Figure 1 shows the regional location and Figure 2 shows the study area, or the physical location encompassing all maintenance sites.

Table 1 SDMP Maintenance Sites

Site Number ¹	Drainage Basin	Site Name	Total Maintenance Length (ft)	Estimated Disturbance Width (ft)	Coastal Zone?
1	New Monterey-Drake	Culvert BO3-H1 at Oak Newton Park	110	5	No
2	Hartnell Drainage	Madison Canyon (armoring reach near Pebble Street) and Culvert D03-H4	270	5 to 20	No
3	Hartnell Drainage	Culvert D03-H6 – Madison south of Manzanita	115	10 to 15	No

City of Monterey
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Site Number ¹	Drainage Basin	Site Name	Total Maintenance Length (ft)	Estimated Disturbance Width (ft)	Coastal Zone?
5	Hartnell Drainage	Lower Madison Canyon (behind Fire trailers downstream to Library reach) & culvert E04-H3	215	15	No
6	Hartnell Drainage	Culvert E04-H4 – Martin at Pacific to Library	95	25	No
8	Hartnell Drainage	Culvert E03-H3 – near Via Paraiso Park	505	20	No
9	Hartnell Drainage	Culvert F02-H3 – Wyndmere	35	40	No
10	Hartnell Drainage	Culvert F02-H2 – Crandall Road	90	40	No
11	Hartnell Drainage	Culvert F03-H1 Mar Vista at Soledad	55	25 to 40	No
12	Hartnell Drainage	Culvert G02-H2 at Forest Knoll and Skyline	245	20	No
15	Hartnell Drainage	Culvert F03-H2 San Bernabe	130	15	No
16	Hartnell Drainage	Culvert F04-H2 – Alameda	135	10	No
17	Hartnell Drainage	Culvert G03-H6 at Via Esperanza	440	25	No
18	Hartnell Drainage	Culvert G03-H9 at San Bernabe & Pacific	100	40	No
19	Hartnell Drainage	Culvert F04-H4 at Pacific	925	10	No
20	El Estero Drainage	Majors Creek (upstream reach between Soledad Drive and Del Monte Center entrance)	460	40	No
21	El Estero Drainage	Culvert F04-17 at Don Dahvee	120	15	No
22	El Estero Drainage	Majors Creek at El Dorado Street (Downstream) & Culverts E05-H1 and F05-H2	300	20	No
23	El Estero Drainage	Iris Canyon, between Via Mirada and El Dorado	100	35 to 75	No
27	Laguna Grande	Wilson road Detention Basin	N/A	150	No
28	Laguna Grande	Highway 68 (Lower Ragsdale) detention basin	N/A	100	No
29	Laguna Grande	Unnamed drainage path at Virgin & Grant Ave (leads to Laguna Grande Lake)	70	30	Yes
30 ²	Laguna Grande	Roberts Lake/Laguna Grande Eastern Culvert25 to 50	80	20	Yes
31 ²	Laguna Grande	Roberts Lake/Laguna Grande West Outfall	350	25 to 50	Yes

Site Number ¹	Drainage Basin	Site Name	Total Maintenance Length (ft)	Estimated Disturbance Width (ft)	Coastal Zone?
33	Del Monte Lake (NPS)	Garden Court Basin	N/A	150	No
34	Laguna Grande	In-N-Out Swale	425	35	Yes
36	Hartnell Drainage	Veterans Drive above American Legion	180	5	No
37	El Estero Drainage	Glenwood Circle at Iris	195	10 to 55	No
38	Hartnell Drainage	San Bernabe to Alameda Sewer Easement	710	40	No

¹ Site numbering is based on the City's drainage facility list, which includes sites that are not part of the SDMP.

² This site is located within the City of Seaside, but will be maintained by the City of Monterey on behalf of the City of Seaside.

Source: City of Monterey, SDMP, 2019a

5. Surrounding Land Uses

The maintenance sites are surrounded by a variety of land uses. As shown in Figure 2, most sites are located in the western portion of Monterey, which is mostly urbanized and developed with residential, commercial, and planned community uses. Sites 29, 30, 31, and 34 are on the City's eastern border with the City of Seaside, along Laguna Grande Regional Park and Robert's Lake and surrounded by residential, commercial, and open space uses. Of these sites, Sites 30 and 31 are within the City of Seaside corporate boundary. Sites 27, 28, and 33 are in the southeastern portion of the City along State Route (SR) 68, surrounded by industrial, open space, and planned community land uses. This portion of the City is less urbanized, with the City of Del Rey Oaks to the north, and Jacks Peak Park and Tehama Golf Club to the south.

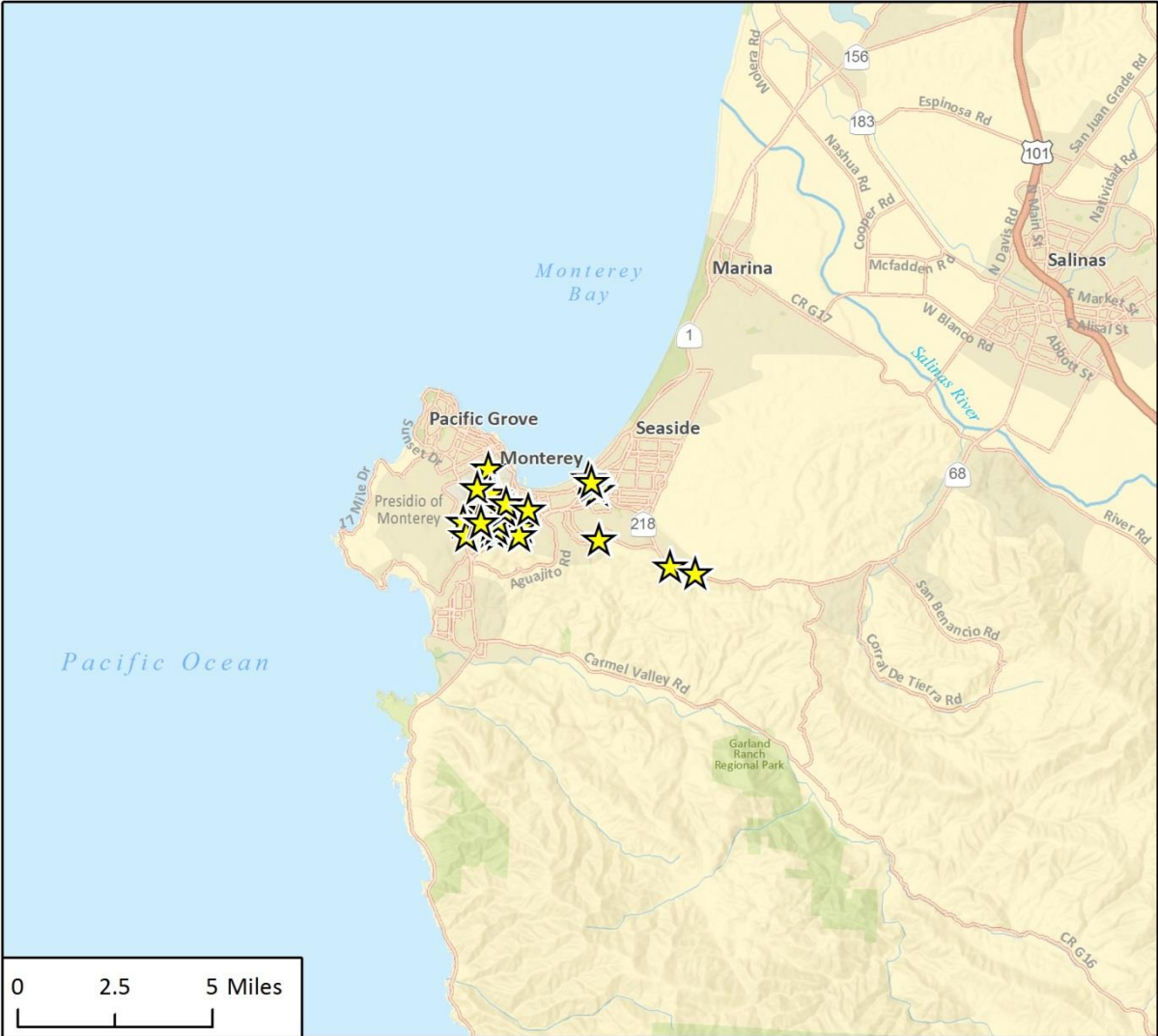
6. Setting

Background

The City's drainage system conveys stormwater to ensure the safety of property and human life from flooding. The system also conveys urban runoff that flows from irrigated landscape areas, driveways, and streets into drainage facilities, and, ultimately, to the Monterey Bay and Pacific Ocean. The City of Monterey is responsible for maintaining storm drainage facilities that manage stormwater runoff in an efficient, economic, environmentally and aesthetically acceptable manner for the protection of property and life.

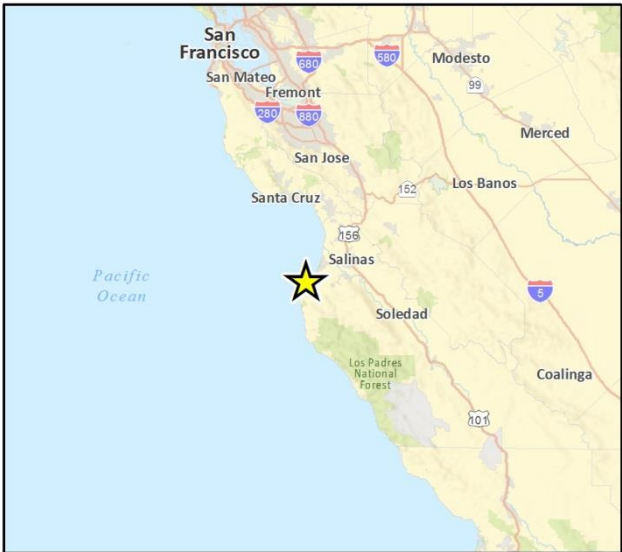
In 2010 and 2013, the City received notices from the United States Environmental Protection Agency (USEPA) and the Central Coast Regional Water Quality Control Board (CCRWQCB) requesting that the City complete a jurisdictional determination to identify jurisdictional waters and identify permitting needs for work that may affect these waterways. In response to these notices, the City ceased routine maintenance activities within potentially jurisdictional waterways. The City is working to comply with USEPA and CCRWQCB directives and anticipates preparation of a complete storm drainage management program. However, certain sites require maintenance activities that cannot wait for a City-wide program to be finalized. Therefore, the City has identified the highest priority sites that require maintenance as soon as possible. The City completed its Storm Drainage

Figure 1 Regional Location



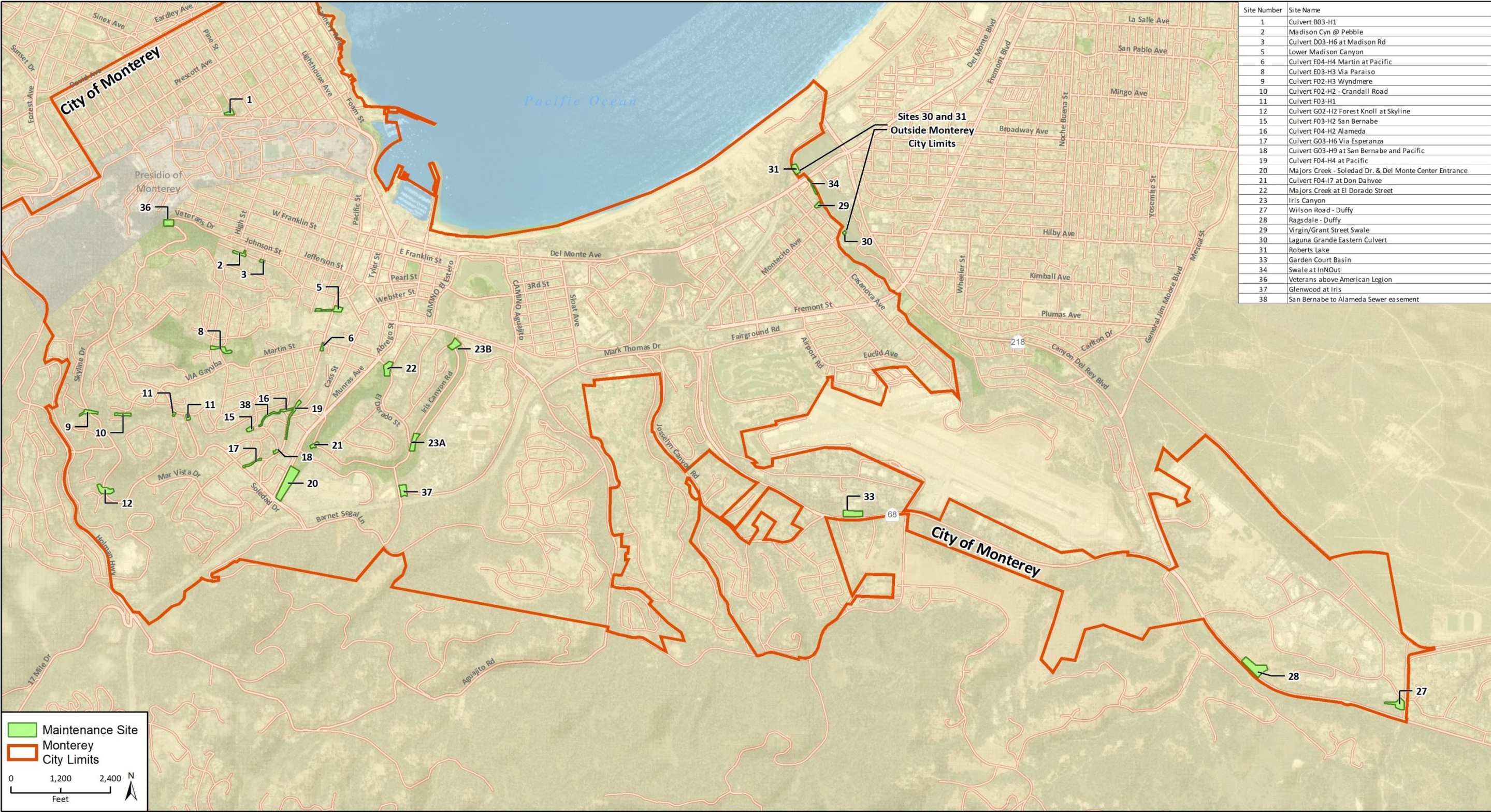
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★ Project Location



3D Fig. 1 Regional Location

Figure 2 Study Area Map



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Storm Water Facilities 11x17

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Maintenance Plan (SDMP) in March 2019 to obtain the necessary approvals for maintenance work, and to guide the work activities, in advance of the longer-term management program. This Initial Study-Mitigated Negative Declaration (IS-MND) was prepared to ensure that the maintenance activities included in the SDMP comply with the California Environmental Quality Act (CEQA). The SDMP addresses maintenance activities only at 29 high priority sites, and is not the City's comprehensive city-wide storm drain management program. Therefore, this IS-MND analyzes the 29 high priority maintenance sites and the specific maintenance activities identified in the SDMP.

Existing Environmental Setting

The City is bounded to the north by the southerly end of Monterey Bay. Unincorporated Monterey County bounds the City to the west, south, and east, with the City of Pacific Grove forming the northwest boundary, and the City of Seaside forming a portion of the eastern boundary.

The climate within the City of Monterey is a cool Mediterranean type, greatly influenced by proximity to the Pacific Ocean, with year-round coastal fog in the morning, generally cleared by afternoon breezes. Average temperatures range from approximately 44 to 68 degrees Fahrenheit, with highest temperatures in September, and lowest temperatures in January. The City receives approximately 21 inches of rainfall annually, typically concentrated between December and February, with dry summers (U.S. Climate Data 2019).

The study area is located within the Point Pinos (1806001503) and Seaside (1806001504) subwatersheds, and an undefined subwatershed of the larger Monterey Bay HUC-10 watershed (USGS 2017). Several ephemeral/intermittent waterways such as Hartnell Creek, Iris Canyon Creek, Canyon Del Rey Creek, Josselyn Canyon Creek, and Aquajito Creek, travel through the City from the surrounding hills. These subwatershed drainages are heavily modified in their lower reaches as they approach the City and more densely developed areas. Most of these creeks and drainages are diverted underground to stormwater systems west of the downtown area before flowing into El Estero, Del Monte Lake, and Laguna Del Ray before eventually discharging into the Pacific Ocean (USGS 2017).

Topography surrounding the maintenance sites includes predominantly flat terrain with gradually rolling hills. Vegetation composition and structure within the study area varies from site to site. The biological resources assessment (BRA) performed for the SDMP, included as Appendix C, identified eight vegetation communities and/or land cover types within the study area: coast live oak woodland, Monterey pine forest, mixed Monterey pine and coast live oak woodland, annual grassland, ruderal/developed/landscaped, Arroyo willow riparian woodland, mixed riparian woodland, and freshwater emergent wetland.

7. Project Description

The proposed project involves implementation of the SDMP. The SDMP describes operations and maintenance activities for 29 high priority sites over a five-year period necessary for upkeep and function of the City's drainage system. The maintenance sites included in the SDMP are storm drainage facilities within the City's surface system channel network that convey stormwater runoff to the Monterey Bay, including culverts, detention basins, and channels. The purpose of the project is to guide the City of Monterey in its oversight responsibilities and management of its drainage systems by outlining annual drainage maintenance planning and implementation activities.

Performing maintenance at these sites would maximize stormwater conveyance and reduce flood risk.

The following are the objectives of the SDMP:

- Providing an inventory of conditions at 29 high priority storm drain maintenance locations within the City's storm drainage system
- Identifying the methods by which the storm system locations would be maintained
- Outlining the authorized activities as a guide to the City, as well as state and federal agencies with regulatory authority over the biological resources and water quality that could be affected by the maintenance

Maintenance Methods and Equipment

Methods

The primary method utilized in maintenance activities would be removal of accumulated sediment and vegetation that could impede the flow of water. Specific impediment removal techniques and equipment would vary based upon the site-specific characteristics at each site, such as channel size (width and depth), channel type (concrete or earthen), flow characteristics, surrounding land uses, vegetation type and extent, and access constraints. Weather, time constraints, and restrictions related to the rainy season or bird breeding seasons could also affect what methods and equipment are selected, along with considerations to minimize cost and environmental impacts.

Maintenance activities at a given site could affect an entire drainage facility (bank to bank) or occur within a narrow portion of the channel. In most cases, maintenance would be expected to occur along the bottom of the facilities and approximately two feet up the adjacent banks to ensure the ability of the channels to transport water and prevent flooding.

Maintenance activities would include mechanical maintenance, employing heavy equipment typical of excavation activities, to remove sediment, silt, vegetation, and debris. For narrow and shorter channel lengths that are less than five feet wide and less than 1,000 feet long, smaller equipment such as a four-foot wide skid steer would be used. A backhoe would be used from the top of the bank to clear accumulated vegetation and debris within the channel. Various heavy equipment tools would be used for restoration or repair work such as slope stabilization.

At detention ponds, maintenance activities would include repair of inlets, outlets, forebays, low flow channel liners, and energy dissipaters. Routine removal of sediment within detention pond forebays is anticipated. When sediment accumulation occupies more than 20 percent of design capacity of a detention pond facility, non-routine maintenance would be required for sediment removal. Permit applications for the proposed project allow non-routine maintenance activities that include removal of sediment or other materials (i.e., vegetation) from the target detention basins as needed for the City to maintain the facilities and flood capacity. To the extent that non-routine maintenance meets this description, such activities are covered under this Initial Study. If activities require a greater level of ground disturbance, removal of existing structures, or installation of new structures, these activities would require separate environmental review under CEQA.

Non-mechanical and routine maintenance of the surface channel system would include trash and debris removal, mowing, removal and thinning of obstructive shrubs and trees, and repair and replanting of eroded areas in detention basins and channels. All dead trees and trees in the flow line

with the potential to restrict flow would be removed. Mowing and removal of vegetation would be performed with caution to prevent soil destabilization.

Maintenance would be expected to occur primarily during the summer and early fall prior to the rainy season (October 1 to April 30). Following completion of the maintenance activities and removal of all excavation waste (spoils) and equipment, close out activities would include: installation of erosion control devices such as straw wattles, geotextile blankets/nets, and/or hydroseed; implementation of on-site erosion control measures, and/or securing the site from public access.

Equipment

Some maintenance activities would be performed manually by crews using hand tools, while other activities would require heavy equipment. Table 2 lists equipment that would be used to perform maintenance activities.

Table 2 Maintenance Equipment

Heavy Equipment	Hand Tools
1-ton dump truck, 5-ton or larger dump truck, backhoe, loader, skid steer, bobcat, DR-mower, wood chipper, all-terrain vehicle, excavator, vactor ¹ , portable pump, bulldozer	Chainsaw, clippers, mowers, weed whips, buckets/bales

¹ A vactor is a vacuum truck equipped with a pump that pneumatically draws up liquids into the truck's tank for transport and disposal
Source: City of Monterey 2019a.

Maintenance Implementation

Maintenance activities would be conducted on an annual basis in accordance with the terms and conditions of the master permits, which include: a Site Development Permit (SDP) and a Coastal Development Permit (CDP); 401 Certification from the Regional Water Quality Control Board (RWQCB); a 1605 Streambed Alteration Agreement from California Department of Fish and Game (CDFW); and a 404 Permit from the U.S. Army Corps of Engineers (USACE). The estimated length of work per site is between one day and two weeks.

Annual field surveys would occur at maintenance sites, as well as additional inspections following major storm events. Field surveys would evaluate the functional and aesthetic aspects of each site to identify the necessary maintenance activities. The functional evaluation would consider performance and safety, and the aesthetic evaluation would consider activities to maintain public acceptance of the facility.

Inspections of detention basins would ensure that the basin continues to function as intended. Outlets would be examined for signs of clogging, erosion, slumping, excessive sedimentation levels, overgrowth, embankment and spillway integrity, and damage to any structural element.

Inspections would include identification of contaminated stormwater, such as the presence of floating and suspended materials, oil and grease, discoloration, turbidity, odor, foam, or unusual vegetative growth.

Field survey results would be used to prioritize the removal of debris, trash, sediment, overgrown or weedy vegetation at each drainage facility. Major capital improvements such as repair of a failing retaining wall or reconstruction of an outlet structure would be similarly prioritized based on field

survey results. Implementation of capital improvement projects would be subject to budget availability. Implementation of capital improvements is not part of the SDMP, and capital improvements are not covered in this analysis.

Annual Maintenance Plan

An Annual Maintenance Plan (AMP) would be prepared with a description of each maintenance site. The AMP would summarize field survey results, prioritization, and scheduling. The AMP would be posted on the City website during the City's annual Capital Improvement Program review and approval process.

Maintenance Reporting

An Annual Maintenance Report would be prepared to document the maintenance activities and mitigation measures which took place in the preceding year and to outline maintenance planned for the coming year. The Annual Maintenance Report would create a record to track all maintenance activities, including: when and which facilities have been inspected and cleaned; unusual flows observed during inspection (particularly dry weather flows); and any follow-up actions or referrals that were taken. This reporting would provide an opportunity to identify structural retrofit needs and long-term maintenance requirements.

Emergency Maintenance

In addition to planned maintenance activities, the SDMP addresses emergency maintenance activities that may be necessary due to conditions such as fire or flood. When emergency conditions occur in part of the drainage system, the City may perform emergency maintenance. Conditions requiring emergency maintenance would be those that present a threat of loss or damage to life, property or essential public services. Emergency maintenance would meet the same objectives as routine maintenance, to remove impediments to stormwater drainage, but would occur in response to sudden changes in condition.

8. Other Public Agencies Whose Approval is Required

The SDMP and this IS-MND require approval by the City of Monterey. Additionally, some of the specific maintenance activities require discretionary approval from the following agencies and the City of Seaside:

- U.S. Environmental Protection Agency (USEPA)
- U.S. Army Corps of Engineers (USACE): Section 404 Nationwide Permit Pre-construction Notification
- U.S. Fish and Wildlife Service (USFWS)
- California Environmental Protection Agency (CalEPA)
- California Regional Water Quality Control Board (RWQCB): Section 401 Clean Water Certification
- California Department of Fish and Wildlife (CDFW): Section 1602 Lake and Streambed Alteration Agreement
- California Coastal Commission: Coastal Development Permit (Sites 29 and 34 only)
- City of Seaside: Coastal Development Permit (Sites 30 and 31 only)

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology/Soils | <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

Determination

Based on this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- ☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Printed Name

Title

Environmental Checklist

1 Aesthetics	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. Would the project have a substantial adverse effect on a scenic vista?

Viewpoints that provide expansive views of a highly valued landscape for the benefit of the general public are considered to be scenic vistas. Scenic vistas may be informally recognized, or officially designated by a public agency.

The City of Monterey General Plan (2016a) identifies the coastline and the central ridge of wooded hills that separate the City from the Carmel Valley as the two dominant scenic features that are essential for maintaining the scenic character of Monterey. One or both features are visible throughout most of the City. The General Plan Urban Design Element identifies the following additional sites and features for their scenic value: natural rocky shoreline of the water's edge; random mooring concept of the outer harbor; San Carlos Beach Park; Monterey Bay Coastal Trail; pine- and oak-covered ridge and foothills that form the City's forested backdrop; lakes and waterways, including Lake El Estero, Washerwoman's Pond, Del Monte Lake at the Naval Postgraduate School, Roberts Lake, and Laguna Grande. The Urban Design Element also states that

all major roads leading to the City are scenic corridors and encourages, under Goal h, the protection and enhancement of scenic entrances, which follow a park concept.

Maintenance Sites 29 and 34 are swales adjacent to Laguna Grande Lake, and Sites 30 and 31 are outfalls into Laguna Grande Lake and Roberts Lake, respectively. These two waterbodies are identified for scenic value by the General Plan Urban Design Element. The other SDMP maintenance sites provide views of the City's scenic vistas and features described above. However, SDMP maintenance activities would occur at ground-level and would not impede scenic views. The scenic character of Roberts Lake and Laguna Grande Lake would not be altered, as maintenance work would not add new structures or otherwise substantially change the appearance of the sites. Disruption of views would be limited to the duration of construction activities, which would be temporary. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

One state scenic highway, State Route 1 (SR 1), occurs in the study area. SR 1 is designated as a state scenic highway from the Monterey-Salinas Highway (SR 68) to the Carmel River, and is designated as Eligible – Not Officially Designated north of the connection with SR 68 (California Department of Transportation [Caltrans] 2011). The City of Monterey General Plan additionally identifies all major roads entering the City as scenic corridors (City of Monterey 2016a).

SDMP maintenance activities would occur throughout the City, including at sites visible from state scenic highways. Site 37, near the intersection of Iris Canyon Road and Glenwood Circle, is within 300 feet of SR 1, and Sites 28 and 33 are adjacent to SR 68. Removal of vegetation, including shrubs and trees, could occur at these sites. However, as described in Section 4, *Biological Resources*, because of the small area of each maintenance site, impacts to vegetation would be limited. Mowing and vegetation removal would be performed only when necessary to remove obstructions from the conveyance channel, and would not substantially alter the views from state scenic highways. No rock outcroppings or historic buildings would be affected by maintenance activities. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

As described above, the visual character of the City stems primarily from its two dominant features, the coastline and the ridge of wooded hills. In addition to scenic vistas of natural features within and surrounding the City, valued public views include those of historic buildings and adobe structures. Accordingly, General Plan Urban Design Element Policy e.1 is to protect and enhance the setting of historic buildings.

Chapter 37 of the City of Monterey Municipal Code is the City's Preservation of Trees and Shrubs Ordinance (Tree Ordinance). The Tree Ordinance identifies trees as contributors to the City's natural scenic beauty, and is intended to assure preservation of trees and replacement of trees when removal is unavoidable. Under Section 37-2.5, it is unlawful to cut, prune, top, damage or remove

any tree or shrub in any City-owned park, green belt, or other public area unless pursuant to a permit issued by the City Forester.

Because maintenance activities would occur only at existing drainage facilities, impacts to visual character and public views would be limited to vegetation clearance and tree removal. Implementation of the SDMP would not involve land use changes, new structures, or other substantial alterations to the existing visual character of the maintenance sites. While vegetation clearing and tree removal may be necessary to perform maintenance, these activities would be limited to the removal of growth that inhibits the function of or access to drainage facilities. In addition, field surveys would be conducted by City staff to identify maintenance needs would include an evaluation of a site's aesthetic aspects in order to uphold public acceptance of the facility. Based on the field survey findings, activity that would degrade the sites' visual character would be avoided or minimized. Therefore, implementation of the SDMP would not have a substantial effect on the visual character or quality of public views of the maintenance sites and their surroundings.

SDMP maintenance sites are located throughout the City of Monterey and in the City of Seaside, predominantly within urban areas. Implementation of the SDMP would not change the land use of maintenance sites or require changes in zoning. By improving drainage function while avoiding activity that would degrade visual character, the SDMP complies with General Plan Open Space Element Goal d., to preserve and improve lakes and waterways as important visual, habitat, flood protection and recreation resources.

When maintenance activities would require tree removal, a tree removal permit issued by the City Forester would be required. At the discretion of the City Forester, conditions of approval may be imposed on the removal requiring planting of replacement trees. Furthermore, as discussed in Section 4, *Biological Resources*, SDMP maintenance could impact special status Monterey cypress and Monterey pine trees. Therefore, Mitigation Measure BIO-1 requires pre-activity surveys for special status plant species at all maintenance sites, and Mitigation Measure BIO-3 requires avoidance of impacts to Monterey pine and Monterey cypress to the extent feasible, with replanting of any removed trees at a 2:1 ratio. Mitigation Measure BIO-2 requires a restoration plan for instances in which special status plants are impacted. Compliance with City Forester requirements, receipt of a tree removal permit, and compliance with tree-removal mitigation identified in this IS-MND would ensure that the project would not conflict with applicable zoning and other regulations governing scenic quality.

Impacts related to visual character, public views, and conflicts with applicable zoning and other regulations governing scenic quality would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- d. *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Implementation of the SDMP would not add new structures or lighting. Maintenance activities would occur during the daytime, and no temporary lighting would be required. There would be no impact related to light or glare that would affect day or nighttime views in the area.

NO IMPACT

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2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b. *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*
- e. *Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?*

No agricultural operations occur within the City, and no land is zoned for such use (City of Monterey 2016a). According to the California Department of Conservation (DOC), there is no Prime Farmland,

Unique Farmland, Farmland of Statewide Importance (DOC 2018), or Williamson Act Contracts (DOC 2016) within the City limits of Monterey or Seaside.

Implementation of the SDMP would involve maintenance activities at existing stormwater drainage facilities. The SDMP does not include changes in zoning or other activities that could result in conversion of farmland to non-agricultural use. There would be no impact.

NO IMPACT

c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*

d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

The cities of Monterey and Seaside do not contain land zoned for forest use or timber production (City of Monterey 2016a, City of Seaside 2010). Implementation of the SDMP would include some trimming and removal of vegetation, including trees and shrubs. However, removal and trimming of trees and shrubs would occur only when necessary to remove an impediment to effective function of stormwater drainage facilities. As discussed in Section 1, *Aesthetics*, substantial tree removal is not anticipated to be necessary. Furthermore, tree removal would require a permit from the City Forester, and tree replacement would occur at the City Forester's discretion. Although not required to reduce this impact to less than significant, Mitigation Measures BIO-1, BIO-2, and BIO-3 would further reduce impacts related to tree removal by requiring protections for special status plant species.

The SDMP does not include changes to zoning or land use at the maintenance sites, or other changes that could result in conversion of forest land to non-forest use. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Air Quality Standards and Attainment

The study area lies within the North Central Coast Air Basin (NCCAB), which is comprised of Monterey, Santa Cruz, and San Benito counties and is under the jurisdiction of the Monterey Bay Air Resources District (MBARD).¹ As the local air quality management agency, MBARD is required to monitor air pollutant levels to ensure that State and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the NCCAB is classified as being in “attainment” or “nonattainment.” The NCCAB is designated a nonattainment area for the State PM₁₀ standard and the State one-hour and eight-hour ozone standards (California Air Resources Board [CARB] 2017a).² The NCCAB is in attainment of all other federal and State standards. Because the NCCAB currently exceeds the State ozone and PM₁₀ standards, it is required to implement strategies to reduce pollutant levels to recognized acceptable standards.

Air Quality Management

In March 2017, MBARD adopted the *2012-2015 Air Quality Management Plan (2015 AQMP)* as an update to the 2012 AQMP. The 2015 AQMP is based on growth forecasts provided by the Association of Monterey Bay Area Governments (AMBAG) and assesses and updates elements of

¹ MBARD was formerly called the Monterey Bay Unified Air Pollution District (MBUAPCD); accordingly, documents authored by the MBUAPCD are cited as authored by MBARD in this document.

² The non-attainment transitional area designation for ozone is defined by California Health and Safety Code Section 40925.5 as a nonattainment area in which air quality data show three or fewer exceedances of the State standard at each monitoring site in the area during the most recent calendar year.

the 2012 AQMP, including the air quality trends analysis, emissions inventory, and mobile source programs. The 2015 AQMP only addresses attainment of the State eight-hour ozone standard because in 2012, the USEPA designated the NCCAB as in attainment for the current national eight-hour ozone standard of 0.075 parts per million (ppm). In October 2015, the national standard was reduced to 0.070 ppm. However, the NCCAB continues to be in attainment with the federal ozone standard (MBARD 2017).

The following MBARD rules would limit emissions of air pollutants during implementation of the SDMP:

- **Rule 400 (Visible Emissions).** Discharge of visible air pollutant emissions into the atmosphere from any emission source for a period or periods aggregating more than three minutes in any one hour, as observed using an appropriate test method, is prohibited.
- **Rule 402 (Nuisances).** No person shall discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or which endanger the comfort, repose, health, or safety of any such persons or the public; or which cause, or have a natural tendency to cause, injury or damage to business or property.

Air Pollutant Emission Thresholds

Criteria for determining consistency with the MBARD's AQMP are defined in Section 5.5 of the MBARD's *CEQA Air Quality Guidelines* (2008) and include the following:

- For residential projects, the project population at the year of project completion does not exceed the forecast for the appropriate five-year increment for the jurisdiction in which the project is located. In Monterey County, consistency with population forecasts is based on comparing a project's population with countywide forecasts to avoid confusion related to declining population forecasts for cities on the Monterey Peninsula.
- For commercial, industrial, or institutional projects intended to meet the needs of the population as forecast in the AQMP, the estimated current population of the county in which the project is located does not exceed the applicable population forecast in the AQMP.
- For non-residential population-related activities (e.g., hotels and motels), consistency with the AQMP is evaluated on a case-by-case basis.

Furthermore, a project's cumulative air quality impacts would be considered significant if the project is not consistent with the AQMP.

MBARD has also issued criteria for determining the level of significance for project-specific impacts within its jurisdiction. Based on criteria set forth in MBARD's *CEQA Air Quality Guidelines* (2008), implementation of the SDMP would result in significant impacts related to criteria air pollution if the maintenance activities would result in air pollutant emissions that exceed the thresholds in Table 3.

Table 3 Air Quality Thresholds of Significance

Pollutant/ Precursor	Maximum Construction Emissions (lbs/day)	Maximum Operational Emissions (lbs/day)
VOC/NO _x	n/a	137
CO	n/a	550
SO _x	n/a	150
PM ₁₀	82 ¹	82

Notes: lbs/day = pounds per day; VOC = volatile organic compounds (also referred to as ROG, or reactive organic gases), NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = oxides of sulfur; PM₁₀ = particulate matter with a diameter of 10 micrometers or less

¹ This threshold only applies if construction is located nearby or upwind of sensitive receptors. In addition, a significant air quality impact related to PM₁₀ emissions may occur if a project uses equipment that is not "typical construction equipment" as specified in Section 5.3 of the MBARD CEQA Air Quality Guidelines.

Source: MBARD 2008

In addition, a significant air quality impact related to carbon monoxide would occur if the project would cause one or more of the following to occur (MBARD 2008):

- The level of service (LOS) at an intersection or road segment to degrade from D or better to E or F
- The volume to capacity (V/C) ratio at an intersection or road segment to increase by 0.05 or more
- The delay at an intersection currently operating at LOS E or F to increase by ten seconds or more
- Reserve capacity at an unsignalized intersection currently operating at LOS E or F to decrease by 50 or more
- Substantial heavy-duty traffic or substantial traffic along urban street canyons or near a major stationary source of CO

a. *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding the forecasts used in the development of the AQMP. Implementation of the SDMP, which describes operations and maintenance activities at high priority storm drain maintenance locations, would not include new housing or businesses, nor would operation and maintenance activities require new employees. Therefore, implementation of the SDMP would not generate population, housing, or employment growth. As a result, the project would not exceed the AMBAG growth forecasts utilized in the 2015 AQMP, and thus would not conflict with or obstruct implementation of the AQMP. No impact would occur.

NO IMPACT

b. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

The proposed maintenance activities would generate emissions associated with fugitive dust and exhaust emissions from heavy construction equipment. Project emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2. CalEEMod was developed by the

South Coast Air Quality Management District and is used by jurisdictions throughout the state to quantify criteria pollutant emissions. Daily emissions from maintenance activities at the largest site were modelled, then multiplied by three to estimate maximum daily pollutant emissions, assuming that maintenance activities could occur at up to three sites simultaneously. For the purposes of modeling, this analysis relied upon the following conservative, reasonable worst-case scenario assumptions:

- A maximum site area of approximately 28,400 square feet would be disturbed (based on the largest maintenance site shown in Table 1)
- All off-road heavy equipment listed in Table 2 would be utilized simultaneously at each site for eight hours a day
- Approximately 10 two-way worker trips to each site would occur during each day of maintenance activities, as discussed in Section 17, Transportation
- Approximately one two-way vacuum trip would occur to each site during each day of maintenance activities³
- Approximately 290 cubic yards of material would be exported annually (approximately 435 tons total, or 15 tons of material per site)⁴
- A total of approximately 87 two-way haul truck trips would occur annually (three 5-ton haul truck trips for each site)⁵
- Maintenance activities would occur once at each site annually
- Maintenance activities would occur at up to three sites simultaneously⁶

This analysis does not quantify emissions from the hand tools listed in Table 2 because these tools are not large emission-generating construction equipment and emissions of criteria pollutants from these tools would be negligible. Table 4 summarizes the project's maximum daily pollutant emissions.

³ A vacuum is a vacuum truck equipped with a pump that pneumatically draws up liquids into the truck's tank for transport and disposal.

⁴ In general, one cubic yard of aggregate, sand, or dirt is equal to 1.5 tons (SoilDirect 2019).

⁵ 435 tons divided by 5-ton dump trucks

⁶ The number of sites that could be maintained simultaneously is limited by the number of City staff available to perform maintenance activities.

Table 4 Unmitigated Maximum Daily Air Pollutant Emissions from Maintenance Activities

	Estimated Maximum Daily Emissions (pounds/day) ¹					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Unmitigated Maximum Daily Emissions	13.4	141.4	86.1	0.2	26.7	16.5
MBARD Regional Thresholds	137	137	550	150	82	n/a
Threshold Exceeded?	No	Yes	No	No	No	No

MBARD: Monterey Bay Air Resources District; ROG: reactive organic gases (also referred to as VOC, or volatile organic compounds); NO_x: nitrogen oxides; CO: carbon monoxide; SO₂: sulfur dioxide; PM₁₀: particulate matter 10 microns or less in diameter; PM_{2.5}: particulate matter 2.5 microns or less in diameter

N/A = not applicable

Notes: All numbers have been rounded to the nearest tenth. Emissions presented are the highest of the winter and summer modeled emissions.

¹ Daily emissions from maintenance activities at one site were multiplied by three because maintenance activities may be occurring at up to three sites on any given day.

Source: See Appendix B for CalEEMod calculations and assumptions

As shown in Table 4, under a reasonable worst-case scenario, NO_x emissions from maintenance activities would exceed MBARD operational thresholds. No other emissions would exceed applicable thresholds. Mitigation Measure AQ-1 is required to ensure that NO_x emissions resulting from implementation of the SDMP would not exceed MBARD operational thresholds. As shown in Table 5, emissions of NO_x from maintenance activities would be reduced below MBARD regional thresholds with implementation of Mitigation Measure AQ-1.

Table 5 Mitigated Maximum Daily Air Pollutant Emissions from Maintenance Activities

	Estimated Maximum Daily Emissions (pounds/day) ¹					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Mitigated Maximum Daily Emissions	4.2	82.0	105.9	0.2	24.0	14.2
MBARD Regional Thresholds	137	137	550	150	82	n/a
Threshold Exceeded?	No	No	No	No	No	No

MBARD: Monterey Bay Air Resources District; ROG: reactive organic gases (also referred to as VOC, or volatile organic compounds); NO_x: nitrogen oxides; CO: carbon monoxide; SO₂: sulfur dioxide; PM₁₀: particulate matter 10 microns or less in diameter; PM_{2.5}: particulate matter 2.5 microns or less in diameter

N/A = not applicable

Notes: All numbers have been rounded to the nearest tenth. Emissions presented are the highest of the winter and summer modeled emissions.

¹ Daily emissions from maintenance activities at one site were multiplied by three because maintenance activities may be occurring at up to three sites on any given day.

Source: See Appendix B for CalEEMod calculations and assumptions.

Therefore, with mitigation incorporated, implementation of the SDMP would not result in a cumulatively considerable net increase of any criteria pollutant for which the NCCAB is non-attainment. Impacts to regional air quality and local receptors due to project emissions would be less than significant with mitigation incorporated.

AQ-1 Tier 3 Construction Equipment

Maintenance activities shall utilize minimum Tier 3 construction equipment and/or equipment powered by electricity or renewable fuels.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. Sensitive receptors are defined as land uses that are more likely to be used by these population groups and include health care facilities, retirement homes, school and playground facilities, and residential areas. As shown in Figure 2, maintenance activities would occur at maintenance sites throughout the City of Monterey, and many sites are located in close proximity to residential land uses and schools. However, as discussed under significance criteria (b) above, project emissions would not exceed the MBARD regional thresholds, which are designed to be protective of public health.

Traffic-congested roadways and intersections have the potential for the generation of localized CO levels (i.e., CO hotspots). In general, CO hotspots occur in areas with poor circulation or areas with heavy traffic. As discussed in Section 17, *Transportation*, maintenance activities would require up to ten worker trips per site per day, which would not significantly impact traffic on local roadways. Therefore, implementation of the SDMP would not result in CO hotspots on adjacent roadways and would not expose sensitive receptors to substantial pollutant concentrations, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Maintenance activities requiring mechanical equipment would generate short-term oil or diesel fuel odors. The project would not alter the operation of existing storm drain infrastructure; therefore, no operational odors would occur. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Rincon prepared a BRA and Jurisdictional Waters and Wetland Delineation (JD) for the SDMP. The following analysis is based on the findings of these technical studies, which are included as Appendix C.

Setting

The maintenance sites include 29 discrete locations within which regular maintenance may be required to ensure proper storm drainage. The biological study area (BSA) as evaluated in the BRA is comprised of these 29 sites, including work areas, access routes, and staging areas within the City's right-of-way. These sites occur in areas of predominantly flat topography surrounded by gradually rolling hills, and within predominantly urban and residential developed portions of the City. Most of the maintenance sites occur in residential areas and some are actively managed for recreational use, with adjacent existing roads, trails, parking areas, picnic areas, play structures, restrooms, and landscaping. The maintenance sites include culverts associated with drainage ditches, seasonal wetlands, lakes, ephemeral and perennial streams, and seasonally flooded constructed stormwater basins, which require maintenance to prevent flooding.

The maintenance sites are located within the Point Pinos and Seaside subwatersheds, and an undefined subwatershed of the larger Monterey Bay HUC-10 watershed (1806001503 and 1806001504; USGS 2017). Several ephemeral/intermittent waterways such as Hartnell Creek, Iris Canyon Creek, Canyon Del Rey Creek, Josselyn Canyon Creek, and Aquajito Creek, travel through the City from the surrounding hills. These subwatershed drainages are heavily modified in their lower reaches as they approach the City and more densely developed areas. Most of these creeks and drainages are diverted underground into stormwater systems west of the downtown area before flowing into El Estero, Del Monte Lake and Laguna Del Ray, before eventually discharging into the Pacific Ocean (USGS 2017).

Vegetation composition and structure within the maintenance sites varies from site to site, but generally falls within eight vegetation communities and land cover types. In general, vegetation within maintenance sites consists of a canopy dominated by coast live oak (*Quercus agrifolia*) and/or Monterey pine (*Pinus radiata*) at the majority of the maintenance sites and a mixed canopy of ornamental and planted species at several sites. Due to the proximity of the maintenance sites to residential and urban development, the typical understory at most sites is disturbed and includes ornamental and invasive species, including infestations of Himalayan blackberry (*Rubus armeniacus*), English ivy (*Hedera helix*), cape ivy (*Delairea odorata*) and garden nasturtium (*Tropaeolum majus*).

Descriptions of these vegetation communities and land cover types are provided below. These descriptions generally describe the primary constituents and overall composition of the vegetation communities and do not detail the exact composition and structure of each of these vegetation communities within each maintenance site.

Coast Live Oak Woodland

Within the maintenance sites, coast live oak woodland typically consists of a canopy dominated by coast live oak with occasional individuals of other species such as Monterey pine. The understory typically consists of shrubby native species such as poison oak (*Toxicodendron diversilobum*), California blackberry (*Rubus ursinus*), and non-native grasses such as quaking grass (*Briza minor*), wild oats (*Avena fatua*), and perennial ryegrass (*Festuca perennis*). Due to the proximity of the maintenance sites to residential and urban development, the understory also commonly includes

ornamental and invasive species such as French broom (*Genista monspessulana*), English ivy, periwinkle (*Vinca major*), Kikuyu grass (*Pennisetum clandestinum*), and veldt grass (*Ehrharta erecta*).

Holland (1986) and Sawyer et al. (2009) describe this community as singularly dominated by coast live oak with an open underdeveloped understory. Within maintenance sites this vegetation community is largely degraded by fragmentation and disturbance due to development and contains a varying degree of understory density. Within maintenance sites this community occurs primarily along Aguajito Creek and Josselyn Canyon; and is consistent with a live oak, poison oak (*Toxicodendron diversilobum*) alliance (Sawyer et al., 2009). This vegetation community is present at Sites 1, 8, 18, 22, and 27.

Monterey Pine Forest

Monterey pine forest community within maintenance sites typically consists of a canopy dominated by Monterey pine with a dense shrubby understory. Holland (1986) and Sawyer et al. (2009) describe this community as dominated or co-dominated by Monterey pine. Typical understory constituents within maintenance sites include tangles of California blackberry and poison oak, patches of wood fern (*Dryopteris arguta*) and bracken fern (*Pteridium aquilinum*), and non-native grasses such as quaking grass, perennial ryegrass, hedgehog dogtail grass (*Cynosurus echinatus*). Ornamental and invasive species such as French broom, English ivy, and garden nasturtium are also prevalent in the understory at some sites, typically observed in disturbed areas along roads, trails and maintenance facilities. This vegetation community is present at Sites 9, 12, and 16.

Mixed Monterey Pine and Oak Woodland

Portions of the maintenance sites contain a woodland canopy with coast live oak and Monterey Pine occurring as codominant. The understory of this vegetation community is consistent with the coast live oak woodland and Monterey pine forest communities that occur within maintenance sites and typically consist of an open to dense understory of poison oak and California blackberry with non-native grasses, ornamental, and invasive species. This community is not described by Holland (1986), Sawyer et al. (2009), or Mayer and Laudenslayer (1988); however, this vegetation community is best described by live oak, poison oak alliance by Sawyer et al. This vegetation community is found at Sites 2, 3, 8, 9, 10, 11, 15, 19, 20, 21, 23, 29, 33, 36, 37, and 38.

Annual Grassland

Annual grassland vegetation community within the maintenance sites consists of areas dominated by non-native annual grasses such as bromes (*Bromus* spp.) and wild oats and ruderal herbs such as horseweed (*Erigeron canadensis*), wild radish (*Raphanus sativa*), and jersey cudweed (*Pseudognaphalium luteoalbum*). Annual grassland areas within the maintenance sites are generally somewhat disturbed and occur in openings within the tree canopy or along the margins of stream channels. This vegetation community is best described as a wild oat grassland (*Avena fatua* Semi – Natural Herbaceous Stand) by Sawyer et al. (2009). This vegetation community is present at Sites 1, 2, and 28.

Ruderal/Developed/Landscaped

This community is not described by Holland (1986) or Sawyer et al. (2009), but is best described by Mayer and Laudenslayer (1988) as an “Urban” community. This vegetation consists of a mixture of native, non-native, and ornamental species in tree groves, street strips, shade trees, lawns, ruderal areas, and paved areas. Tree species found in this community are highly variable and typically non-

native or not occurring as a natural community woodland. Species observed in the maintenance sites include blue gum eucalyptus (*Eucalyptus globulus*), red plum (*Prunus cerasifera*), mock orange (*Pittosporum undulatum*), with some Monterey cypress (*Hesperocyparis macrocarpa*) among others. This vegetation community/land cover type also includes disturbed and ruderal margins of roads, trails, buildings, etc. and are dominated by ruderal herbs such as annual willow herb (*Epilobium brachycarpum*) and Italian thistle (*Carduus pycnocephalus*) and annual grasses such as bromes, wild oats, and veldt grass. This vegetation community/land cover type also includes all areas that have been developed, including paved roads, sidewalks, parking lots, driveways, buildings, and basketball courts, with no vegetation component. This land cover type is present at each of the 29 sites.

Arroyo Willow Riparian Woodland

This vegetation community consists of a dense canopy dominated by arroyo willow (*Salix lasiolepis*) in tree and shrub forms. Other trees in this community include blackwood acacia (*Acacia melanoxylon*) and occasional coast live oak trees. The understory is generally undeveloped or mixed with native and non-native components. Holland (1986) and Sawyer et al. (2009) describe this community as an arroyo willow thicket (*Salix lasiolepis* Shrubland Alliance). This vegetation type has a limited distribution within the maintenance sites and generally occurs within the maintenance sites that contain more consistent standing water, and is present at Sites 29, 30, and 34.

Mixed Riparian Woodland

Mixed riparian woodland habitat within the maintenance sites consists of Canopy dominated by non-native blue gum and red plum intermixed with native coast live oak, black cottonwood (*Populus trichocarpa*), and box elder (*Acer negundo*). The understory of this vegetation community also consists of primarily of non-native ornamental and invasive species English ivy and garden nasturtium with patches of poison oak and California blackberry. This community is not described by Holland (1986), Sawyer et al. (2009), or Mayer and Laudenslayer (1988). This vegetation community is present at Sites 5, 6, 16, and 30.

Freshwater Emergent Wetlands

Freshwater emergent wetlands are generally dominated by hydrophytic perennial monocots (Mayer and Laudenslayer 1988). In the maintenance sites this community is primarily comprised of large emergent herbaceous wetland species, including tule (*Schoenoplectus californicus*) and cattails (*Typha* spp.), which typically grow in large stands along the margins of ponds and shallow waters within the maintenance sites. Soils within this vegetation community are typically saturated or inundated for many weeks each year. This community also includes patches of other emergent herbaceous wetland vegetation, in which other, smaller emergent species such as rushes (*Juncus* spp.), loosestrife (*Lythrum hyssopifolia*), and rabbitsfoot grass (*Polypogon monspeliensis*) in relatively small patches within the channels at numerous maintenance sites. This vegetation community is best described as a California bulrush marsh – *Schoenoplectus californicus* – *Typha latifolia* association by Sawyer et al. (2009). This vegetation community is present at Sites 1, 20, 27, 28, 30, 31, 33, and 34.

Regulatory Setting

Regulatory authority over biological resources is shared by Federal, State, and local authorities under a variety of statutes and guidelines. Primary authority for general biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the City of

Monterey). CDFW is a trustee agency for biological resources throughout the state under CEQA and also has direct jurisdiction under the California Fish and Game Code (CFGF). Under the California and federal Endangered Species Acts (CESA/ESA), the CDFW and USFWS also have direct regulatory authority over species formally listed as Threatened or Endangered. USACE has regulatory authority over specific biological resources, namely wetlands and waters of the United States, under Section 404 of the federal Clean Water Act. The CDFW and RWQCB protect waters and streambeds at the state level. Additionally, the City of Monterey Municipal Code contains requirements for the protection of protected trees. The analysis in this biological resources assessment is guided by the requirements of these laws, and by the operating standards of the implementing agencies.

City of Monterey

The City of Monterey Municipal Code Chapter 37, *Preservation of Trees and Shrubs*, requires a permit issued by the City prior to removal of “protected trees” (§ 37-8). Protected trees are defined as “a) trees located on a vacant private parcel that are more than two inches (2”) in diameter when measured at a point four feet six inches (4’6”) above the tree’s natural grade; and, b) trees located on a private, developed parcel that are more than six inches (6”) when measured at a point four feet six inches (4’6”) above the tree’s natural grade.” Additionally, a “local landmark tree” is defined as an outstanding, healthy, and prominent tree that is designated landmark in accordance with the procedures established in the ordinance. To be eligible for consideration as a local landmark tree, trees must meet the following minimum criteria:

1. Oak trees
 - a) Ten inch (10”) trunk diameter measured at a point four feet, six inches (4’6”) above natural grade
 - b) Twenty feet (20’) in height measured from natural grade to the top of the canopy
 - c) Prominently visible from public streets, public parking areas, parks or open space, from a minimum distance of one hundred feet (100’)
- 2) Conifers
 - a) Twelve inch (12”) trunk diameter measured at a point four feet, six inches (4’6”) above natural grade
 - b) Thirty feet (30’) in height measured from natural grade to the top of the canopy
 - c) Prominently visible from public streets, public parking areas, parks or open space, from a minimum distance of one hundred feet (100’)
- 3) Non-native ornamental
 - a) Ten inch (10”) trunk diameter measured at a point four feet, six inches (4’6”) above natural grade

According to Section 37-10, tree removal permits are required to be approved before a protected tree may be removed. The City Forester shall review and approve removals that are based on tree health and/or safety considerations. According to Section 37-11, if it is determined after inspection of the property by the City Forester, that the adverse effects of tree removal can be mitigated, conditions may be imposed on the removal. Additionally, according to Section 37-12, local landmark trees may be removed in situations where the tree is determined to be unhealthy, present a safety hazard, or prevents reasonable development of permitted uses on the property.

Methods

The impacts analysis presented in this section is based on the results of the BRA and Jurisdictional delineation (Appendix C). The impacts of maintenance activities on biological resources would be significant if they would exceed the following significance criteria, in accordance with Appendix G of the *State CEQA Guidelines*.

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?*

Special Status Plants

Two special status plant species are present within the maintenance sites as evaluated in the BRA: Monterey cypress (*Hesperocyparis macrocarpa*) (CRPR 1B.2) and Monterey pine (CRPR 1B.1). An additional 17 species have potential to occur within the maintenance sites based upon known ranges, habitat preferences, species occurrence records from the vicinity of the maintenance sites, and presence of suitable habitat.

Of those 17 special status plant species with potential to occur, seven species have a moderate potential to occur within one or more of the sites in the maintenance sites, and three of these are state and/or federally listed species:

- Hickman's onion (*Allium hickmanii*) – CRPR 1B.2
- Pink Johnny-nip (*Castilleja ambigua* var. *insalutata*) – CRPR 1B.1
- Monterey spineflower (*Chorizanthe pungens* var. *pungens*) – Federally Threatened, CRPR 1B.2
- Jolon clarkia (*Clarkia jolonensis*) – CRPR 1B.2
- Seaside bird's-beak (*Cordylanthus rigidus* ssp. *littoralis*) – State Endangered, CRPR 1B.1
- Hickman's cinquefoil (*Potentilla hickmanii*) – Federally Endangered, State Endangered, CRPR 1B.1
- Pacific Grove clover (*Trifolium polyodon*) – State Rare, CRPR 1B.1

Ten special status plant species have a low potential to occur within one or more of the sites in the maintenance sites and two of these are state and/or federally listed species:

- Alkali milk-vetch (*Astragalus tener* var. *tener*) – CRPR 1B.2
- San Francisco collinsia (*Collinsia multicolor*) – CRPR 1B.2
- Hutchinson's larkspur (*Delphinium hutchinsoniae*) – CRPR 1B.2
- Kellogg's horkelia (*Horkelia cuneata* var. *sericea*) – CRPR 1B.1
- Contra Costa goldfields (*Lasthenia conjugens*) – Federally Endangered, CRPR 1B.1
- Oregon meconella (*Meconella oregana*) – CRPR 1B.1
- Marsh microseris (*Microseris paludosa*) – CRPR 1B.2
- Northern curly-leaved monardella (*Monardella sinuata* ssp. *nigrescens*) – CRPR 1B.2
- Santa Cruz microseris (*Stebbinsoseris decipiens*) – CRPR 1B.2
- Monterey clover (*Trifolium trichocalyx*) – Federally Endangered, State Endangered, CRPR 1B.1

The SDMP would involve routine trimming of the vegetation and removal of sediment within suitable habitat for special status plant species. If present, special status plant species could be impacted by directly trimming individuals or removing individuals during the sediment removal process. Removal of special status trees, Monterey cypress and Monterey pine, would only occur if necessary, and would be selectively performed to remove obstructions from the channel; impacts to these species could also occur during trimming/pruning of individuals. Because of the small area of each maintenance site, loss of small numbers of non-listed special status plants is unlikely to result in adverse effects to a local or regional population, and would not be considered significant under CEQA. Loss of a single individual of a state or federally listed species would be considered a significant impact under CEQA. Implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3 would ensure that impacts to the five state and/or federally listed species would be avoided or reduced to less than significant.

Special Status Animals

Eight special status wildlife species have potential to occur within the maintenance sites based upon known ranges, habitat preferences, species occurrence records in the vicinity, and presence of suitable habitat.

Of the eight special status wildlife species with potential to occur at one or more of the sites, three species are state and/or federally listed⁷. The potential for a given species to occur at the maintenance sites has been evaluated as either high, moderate, or low:

One species has a high potential to occur:

- Western pond turtle (*Emys marmorata*) – State Species of Special Concern

Two special status wildlife species have a moderate potential to occur:

- Tricolored blackbird (*Agelaius tricolor*) – State Threatened
- Northern California legless lizard (*Anniella pulchra*) – State Species of Special Concern

Five special status wildlife species have a low potential to occur:

- California tiger salamander (*Ambystoma californiense*) – Federally Threatened, State Threatened
- California red-legged frog (*Rana draytonii*) – Federally Threatened, State Species of Special Concern
- Coast horned lizard (*Phrynosoma blainvillii*) – State Species of Special Concern
- Two-striped garter snake (*Thamnophis hammondi*) – State Species of Special Concern
- Coast Range newt (*Taricha torosa*) – State Species of Special Concern

No individuals or sign of these special status species were observed in the maintenance sites during the reconnaissance surveys; however, western pond turtle was observed in the vicinity and is likely present at Sites 27, 30, and 31. Nesting special status bird species and/or nesting migratory birds protected under CFGC may occur at any one of the maintenance sites. Proposed maintenance activities could result in direct impacts to special status wildlife species and nesting migratory birds during vegetation clearing, vehicle/equipment use on site, or sediment removal. Impacts to non-listed special status wildlife could be considered significant under CEQA if local or regional

⁷ The three state and/or federally listed species are: Tricolored blackbird, California tiger salamander, and California red-legged frog.

populations were adversely affected as a result of maintenance activity. Loss of even a single individual of state and/or federally listed species (e.g. California tiger salamander or California red-legged frog) would be considered significant under CEQA. Impacts to non-special status migratory birds would not be considered significant under CEQA; however, this could be a violation of CFGC. Implementation of Mitigation Measure BIO-6 would ensure violations of CFGC are avoided.

State and/or Federally Listed Species

Suitable aquatic breeding habitat for California red-legged frog, California tiger salamander, and Coast Range newt is not present in the maintenance sites. These species are only expected to occur transiently at Sites 27 and 28 during periods of wet weather. Marginal nesting habitat for tricolored blackbird is present at Sites 30 and 31, and suitable foraging habitat is present at Sites 27, 28, 29, and 34. The SDMP could result in direct impacts to these species if individuals are present within maintenance sites during maintenance activities. Maintenance activities during periods of wet conditions could result in direct impacts to California red-legged frog and California tiger salamander at Sites 27 and 28, and those impacts would be considered significant under CEQA. Impacts to tricolored blackbird would not be expected at Sites 27, 28 and 29, as the species would be expected to disperse from the site if foraging at the time of maintenance activity. However, disturbance resulting in the destruction of active nests or nest abandonment at Sites 30 and 31, due to maintenance activity, would be considered a significant impact under CEQA. Implementation of Mitigation Measures BIO-4, BIO-5, and BIO-6 would ensure impacts to state and/or federally listed species are avoided, and reduced to less than significant.

Two-stripe garter snake and coast horned lizard could potentially occur within woodland or grassland habitat throughout the maintenance sites. Additionally, northern California legless lizard could occur at Sites 29, 30, 31, and 34. The SDMP could result in direct impacts (injury or mortality) to these species if present within the maintenance sites during maintenance activities and those impacts could be considered significant under CEQA if they resulted in an adverse effect to a local or regional population. Implementation of Mitigation Measure BIO-4 would ensure impacts to non-listed special status species are reduced to less than significant.

Potential indirect impacts to special status species includes temporary loss of foraging habitat after vegetation clearing or trimming and sediment removal. The work sites have some level of existing disturbance, and the sites are limited in area compared to the watersheds as a whole. Therefore, temporary loss of foraging habitat that could potentially be created by maintenance activities is not likely to have a substantial adverse effect to foraging habitat for these species, and would not be considered a significant impact under CEQA. Direct significant impacts to special status wildlife species due to implementation of the SDMP would be significant but mitigable with the mitigation/avoidance measures detailed below.

BIO-1 Pre-activity Survey for Special Status Plant Species (All Maintenance Sites)

Prior to the initiation of project maintenance activities, one protocol survey for special status plant species, with a focus on state and/or federally listed species, shall be conducted by a qualified botanist within all of the SDMP maintenance sites. If any non-listed species special status plant species are detected and it is determined by a qualified botanist that there would not be adverse effects to regional or local population, no further mitigation is required. If impacts to a non-listed plant species is determined to be potentially significant (i.e. would adversely affect a local or regional population), then adherence to Mitigation Measure BIO-2 is required.

If federally and/or state listed plant species are found during the protocol survey, and listed species would be directly impacted by the maintenance activity, then the boundary of the work area for the maintenance activity shall be revised to completely avoid impacting all listed plant species if feasible. Listed plant occurrences that are not within the immediate disturbance footprint shall be flagged with brightly colored flagging or fencing and avoided to protect them from harm. If state or federally listed plant species cannot be avoided, then adherence to Mitigation Measure BIO-2 is required.

BIO-2 Plant Mitigation

Based on the survey results under Mitigation Measure BIO-1, if federally and/or state listed plants or non-listed special status plant populations cannot be avoided and would be impacted by proposed maintenance activities, all impacts shall be mitigated by the City at a ratio to be determined by the City (in coordination with CDFW and USFWS as and if applicable), but not less than a ratio of 1:1 (for both area of impact and number of individuals lost), for each species as a component of habitat restoration. A restoration plan shall be prepared by a qualified biologist and submitted to the City for review and approval. (Note: if a federally and/or state listed plant species will be impacted, the restoration plan shall be submitted to the USFWS and/or CDFW for review, and federal and/or state take authorization may be required by these agencies). The restoration plan shall include, at a minimum, the following components:

- Description of the maintenance/impact site (i.e., location, responsible parties, areas to be impacted by habitat type)
- Goal(s) of the compensatory mitigation project [type(s) and area(s) of habitat to be established, restored, enhanced, and/or preserved; specific functions and values of habitat type(s) to be established, restored, enhanced, and/or preserved]
- Description of the proposed compensatory mitigation site (location and size, ownership status, existing functions and values)
- Implementation plan for the compensatory mitigation site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan).
- Maintenance activities during the monitoring period, including weed removal as appropriate (activities, responsible parties, schedule)
- Monitoring plan for the compensatory mitigation site, including no less than quarterly monitoring for the first year (performance standards, target functions and values, target acreages to be established, restored, enhanced, and/or preserved, annual monitoring reports)
- Success criteria based on the goals and measurable objectives; said criteria to be, at a minimum, at least 80 percent survival of container plants and 30 percent relative cover by vegetation type
- An adaptive management program and remedial measures to address any shortcomings in meeting success criteria
- Notification of completion of compensatory mitigation and agency confirmation
- Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism)

BIO-3 Special Status Tree Trimming/Removal (Sites 1, 2, 5, 9, 10, 11, 12, 15, 16, 17, 19, 21, 23, 31, 33, 36, 37, and 38)

To minimize the potential for death or decline of special status tree species, removal, trimming and/or pruning of Monterey pine and Monterey cypress trees shall be avoided to the extent feasible. If trimming or pruning of Monterey pine or Monterey cypress trees is necessary, it shall be conducted to International Society of Arboriculture and American National Standards Institute standards for tree trimming. If removal is necessary, removed trees shall be mitigated by planting replacement trees of the same species at a 2:1 ratio in City open spaces. Replacement trees shall be planted in open space adjacent to the tree removal site where feasible.

BIO-4 Non-listed Special Status Animal Species Avoidance and Minimization (All Sites)

The following measures shall be implemented to avoid or minimize impacts to non-listed special status species:

- Worker Environmental Awareness Program (WEAP). Prior to initiation of maintenance activities under the SDMP (including staging and mobilization), all personnel associated with the maintenance activity(ies) shall attend a programmatic Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to aid workers in recognizing special status biological resources with potential to occur onsite. The specifics of this program shall include identification of the sensitive species and habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of the maintenance activity(ies) and mitigation measures required to reduce impacts to biological resources within the work area. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employers, and other personnel involved with maintenance activities. All employees shall sign a form documenting provided by the trainer indicating they have attended the WEAP and understand the information presented to them. The form shall be submitted to the City Department of Public Works to document compliance. The WEAP training materials shall be kept at the City Department of Public Works and any subsequent trainings for new workers shall be administered by the City. A copy of the training handout shall be kept onsite during maintenance activities.
- Pre-activity Survey for Special Status Wildlife Species. A qualified biologist shall conduct a pre-activity survey for non-listed special status wildlife species within a proposed maintenance site(s) within one week of maintenance activities, if suitable habitat was herein identified at the site. Target species include: western pond turtle, northern California legless lizard, coast horned lizard, two-striped garter snake, and Coast Range newt. If a non-listed special status species is detected during the survey, maintenance activities shall not occur until the individual has left the site or has been relocated to the nearest appropriate habitat by a qualified biologist, as feasible.
- Ground disturbance shall be limited to the minimum necessary to complete maintenance activities. The limits of disturbance shall be flagged.
- Maintenance activities shall be restricted to daylight hours.
- All vehicle maintenance/fueling/staging shall occur not less than 50 feet from any riparian habitat or water body. Suitable containment procedures shall be implemented to prevent spills. A minimum of one spill kit shall be available at each work location near riparian habitat or water bodies.

- All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.
- No equipment shall be permitted to enter wetted portions of any affected drainage channel.
- No monofilament products shall be used in bank stabilization, all erosion control materials shall be natural fibers such as jute.

BIO-5 Endangered/Threatened Species Avoidance and Minimization (Sites 27, 28, 30, and 31)

The following measures shall be implemented to avoid or minimize impacts to listed special status species:

- All maintenance occurring within/adjacent to Sites 27 and 28 (including riparian habitats and wetlands) shall be completed between April 1 and October 31, if feasible, to avoid impacts to California red-legged frog and California tiger salamander.
- Pre-activity Survey for California tiger salamander and/or California red-legged frog. If maintenance activities are proposed for the Wilson Road Detention Basin (Site 27) and Lower Ragsdale Detention Basin (Site 28) while water is present, a qualified biologist should conduct a pre-activity survey for California tiger salamander and/or California red-legged frog within the proposed maintenance site(s) within 48 hours of maintenance activities. For California red-legged frog, the survey should consist of both a daytime and nighttime component.
- If a California red-legged frog or California tiger salamander is detected during the survey, the City shall consult with CDFW and the USFWS. Maintenance activities should not occur until the individual has left the site. No endangered/threatened species shall be captured and/or relocated.
- A qualified biologist shall be present during all onsite work to monitor for CTS and CRLF during maintenance at Sites 27 and 28.
- If at any time during maintenance activities an endangered/threatened species enters the maintenance site or otherwise may be impacted by the project, all maintenance activities shall cease. A qualified biologist shall document the occurrence and consult with CDFW and USFWS, as appropriate, to determine whether it was safe for maintenance activities to resume.
- Any trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.

BIO-6 Pre-construction Surveys for Nesting Birds for Construction Occurring within Nesting Season (All Sites)

For proposed maintenance activities that require the removal of trees or vegetation that may contain a nesting bird, maintenance activities shall occur outside of the nesting season wherever feasible (September 16 to January 31). If maintenance activities must occur during the nesting season (February 1 to September 15), surveys for all nesting birds, and specific surveys for nesting tricolored blackbird at Sites 30 and 31, shall be conducted by a qualified biologist no more than 14 days prior to vegetation removal. The surveys shall include the entire maintenance activity area plus a 200-foot buffer around the site. If active nests are located, all maintenance work shall be conducted outside a buffer zone from the nest to be determined by the qualified biologist. The buffer shall be a minimum of 50 feet for non-raptor bird species and at least 150 feet for raptor species. Larger buffers may be required depending upon the status of the nest and the maintenance activities occurring in the vicinity of the nest. The buffer area may be reduced with consultation and

approval from CDFW. The buffer area(s) shall be closed to all construction personnel and equipment until the adults and young are no longer reliant on the nest site. A qualified biologist shall confirm that breeding/nesting is completed and young have fledged the nest prior to removal of the buffer. A report of these preconstruction nesting bird surveys shall be submitted to the City to document compliance within 30 days of its completion.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Two sensitive natural communities listed by CDFW were identified in the maintenance sites: Monterey pine forest and arroyo willow thickets. Monterey pine forest occurs within three sites: Sites 9, 12, and 16. Arroyo willow thickets are present at Sites 29, 30, and 34. Additionally, riparian communities are present throughout the maintenance sites associated with the drainages and streams. Riparian and wetland vegetation is also present within most of the maintenance sites and is generally considered a sensitive habitat. Maintenance activities such as vegetation trimming or removal, and sediment removal could impact vegetation within a sensitive natural community. These activities would represent a small amount of vegetation disturbance within a much larger overall natural community, and are unlikely to result in a substantial adverse effect to the habitat; however, the following measure would ensure that impacts to riparian habitat are reduced to less than significant.

BIO-7 Riparian/Wetland Vegetation Trimming/Removal (All Sites)

If removal of riparian vegetation is necessary, non-native species and invasive species shall be targeted to the maximum extent feasible. Removed invasive species should be contained to prevent spread and taken to an appropriate facility for disposal. Areas of wetland vegetation should be identified prior to maintenance activities. To minimize impacts to wetland vegetation, native wetland vegetation should be trimmed instead of removed to the maximum extent feasible.

- To reduce the risk of spreading invasive weeds, all tools, equipment, vehicles, clothing, boots, and other gear shall be cleaned prior to entering and again before exiting the site. Removed weed materials should be placed in closed containers for disposal.
- To promote the establishment of native cover species, all temporarily disturbed areas requiring bank stabilization shall be seeded or planted with a mix of locally native species upon completion of work.
- Where feasible in channels adjacent to open space parcels, large diameter woody debris (logs) shall be relocated into uplands and retaining onsite as habitat.

Additionally, Mitigation Measures BIO-1 and BIO-3 above would reduce impacts to sensitive plant communities within the maintenance sites.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Approximately 0.47-acre of wetland waters of the U.S., 2.37 acres/6,633 linear feet of non-wetland waters of the U.S., and 7.7 acres/6,602 linear feet of waters of the State, streambed, banks and riparian habitat were delineated within the maintenance sites. Proposed maintenance would impact federally protected wetlands and waters of the U.S. and State if vegetation removal and/or sediment removal is to occur within the wetlands or waters. A summary of proposed impacts is provided in Table 6 below.

Table 6 Impact Summary of SDMP Maintenance Sites

Site*	Impacts to Jurisdictional Features
1	Proposed maintenance activities would include removal of debris, downed materials, and vegetation removal from 106 liner feet of channel and sediment removal at the trash rack.
2	Maintenance activities would include removal of debris and downed materials from 268 liner feet of channel and trimming of overgrown vegetation up to 10 feet on either side.
3	Maintenance activities would include removal of debris and downed materials from 110 liner feet of channel and trimming of overgrown vegetation to keep the inlet clear.
5	Maintenance activities would include removal of debris, downed materials, and vegetation removal from 167 liner feet of channel and would focus on keeping the trash rack and inlet clear.
6	Maintenance activities would include removal of debris, downed materials, and vegetation removal from 22 liner feet of channel.
8	Maintenance activities would include removal of debris, downed materials, and vegetation removal from 490 liner feet of channel, and would include keeping the trash rack and inlet clear.
9	Maintenance activities would include removal of debris, downed materials, and vegetation removal from 24 liner feet of channel, and a 0.021 acre stormwater basin.
10	Maintenance activities would include removal of debris, downed materials, and vegetation removal from 46 liner feet of channel.
11	Maintenance activities would include removal of debris, downed materials, and vegetation removal from 5 liner feet of channel and would focus on keeping the trash rack and inlet clear.
12	Maintenance activities would include removal of debris, downed materials, and vegetation removal from 233 liner feet of channel.
15	Maintenance activities would include removal of debris, downed materials, and vegetation removal from 130 liner feet of channel and would focus on keeping the inlet and outlet clear.
16	Maintenance activities would include removal of debris, downed materials, and vegetation removal from 189 liner feet of channel, and would include removing sediment to keep the trash racks and inlet clear.
17	Maintenance would include removal of debris and downed materials from 275 liner feet of channel, pruning of vegetation to keep culverts clear and sediment removal if built up the culvert inlet
18	Maintenance activities would include removal of debris, downed materials, and vegetation removal from 77 liner feet of channel.
19	Maintenance activities would include removal of debris, downed materials, and vegetation removal from 843 liner feet of channel.
20	Maintenance would include removal of debris and downed materials from 441 liner feet of channel and pruning of vegetation to keep culverts and the pedestrian bridge clear.

Site*	Impacts to Jurisdictional Features
21	Maintenance activities would include removal of debris, downed materials, and vegetation removal from 87 liner feet of channel.
22	Maintenance activities would include removal of debris, downed materials, and overgrown vegetation removal from 242 liner feet of channel.
23	Maintenance activities would include removal of debris, downed materials, and overgrown vegetation removal from 81 liner feet of channel. Priorities include trimming/removing overgrown vines to be able to see the headwalls and structures, and keeping inlets and outfalls clear.
27	Maintenance activities would include removal of overgrown vegetation along a non-jurisdictional stormwater swale and 0.17 acre stormwater basin to maintain access and functionality. Total impact acreage includes 0.194 acers.
28	Maintenance activities would include removal of debris, downed materials, sediment, and overgrown vegetation at a 0.851 acre stormwater basin and a 0.244 acre stormwater basin. Total impact acreage includes 0.067 acers.
30	Maintenance activities would include clearing accumulated sediment from an outfall approximately 30 feet from the OHWM of Laguna Grande, and pruning overgrown vegetation. Total impact acreage includes 0.023 acers.
31	Maintenance activities would include clearing up to 0.278 cattail and tule that grow in deposited sediment at a culvert outfall.
36	Maintenance activities would include removal of debris, downed materials, and overgrown vegetation removal from 179 liner feet of channel.
37	Maintenance activities would include removal of debris, downed materials, and overgrown vegetation removal from 184 liner feet of channel.
38	Maintenance activities would include removal of debris, downed materials, and overgrown vegetation removal from 731 liner feet of channel.
* Sites 29, 33, and 34 do not propose impacts to any riparian or wetland habitats, and are not included in this table.	
Impact areas provided by Fall Creek Engineering Inc.	

In addition to Mitigation Measure BIO-6 above, the following measures are required to reduce impacts to jurisdictional waters to a less than significant level.

BIO-8 Work within Jurisdictional Areas (All Sites)

- No work shall be completed without securing authorization from the applicable regulatory agencies (USACE, RWQCB, and/or CDFW).
- Ground disturbance shall be limited to the minimum necessary to complete maintenance activities. The limits of disturbance for the maintenance activity shall be flagged. Areas of special biological concern within or adjacent to the limits of disturbance shall have highly visible orange construction fencing installed between said area and the limits of disturbance. Temporary BMPs for erosion and sediment control, such as staked fiber rolls, secured jute netting, secure cover to prevent rainfall erosivity, native seeding or hydroseeding, and the like may be utilized where identified necessary to assist with ground disturbed areas needing temporary stabilization.
- Vehicle maintenance/fueling/staging, if required, shall occur not less than 50 feet from any riparian habitat or water body. Suitable containment procedures shall be implemented to prevent spills. A minimum of one spill kit shall be available at each work location near riparian habitat or water bodies. All spills shall be cleaned up immediately.
- No equipment shall be permitted to enter wetted portions of any affected drainage channel.

BIO-9 Restoration for Impacts to Jurisdictional Areas (All Sites)

- Impacts to jurisdictional areas shall be mitigated through onsite restoration. All temporary impacts to jurisdictional areas shall be fully restored to natural condition. The removal of native trees shall require replacement at a 1:1 ratio either onsite or in adjacent parks and open space as feasible. Removal of more than 20 percent of native vegetation at any one site shall be seeded or planted with a mix of locally native species upon completion of work. Higher mitigation ratios may be required by regulatory agencies.
- Sediment removal shall not alter the natural contours of any channel or jurisdictional feature.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

While wildlife could utilize many of the maintenance sites for local movement, implementation of the SDMP would not alter maintenance sites to the degree that would significantly interfere with wildlife movement or impede the uses of wildlife nursery sites. Conversely, proposed maintenance activities to remove blockages at culverts and drainages would improve ability of wildlife to travel through or utilize the sites. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The maintenance sites include trees within City greenbelts and other public areas. These trees may be impacted by maintenance activities if they would be pruned or removed. As condition of approval, any maintenance activities with the potential to prune or remove trees from public areas would require a permit from the City Forester. Additionally, maintenance sites are small and vegetation removal would be limited to what is necessary to maintain adequate drainage. Therefore, vegetation removal due to maintenance activities would not result in significant loss of greenbelt corridors. With the appropriate permit and implementation of Mitigation Measures BIO-3, BIO-7, BIO-8, and BIO-9, pruning and removal of public trees would not conflict with any local policies or ordinance and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

There are no Habitat Conservation Plans, Natural Community Conservation Plans, or any other similar plans that govern activities in the study area. Therefore, there would be no conflict.

NO IMPACT

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5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Rincon conducted a Cultural Resources Assessment Report (CRA; Appendix D) for the SDMP to identify potential historical and/or archaeological resources in proximity to/within the 29 priority maintenance sites of the study area. The CRA consisted of a cultural resources records search at the Northwest Information Center (NWIC), a Sacred Lands File search with the Native American Heritage Commission (NAHC), Native American outreach, a pedestrian survey, and the preparation of a technical report. The following analysis is based on the results of this study.

- a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*
- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?*

Based on the results of the NWIC search, numerous archaeological sites are present in the vicinity of the SDMP study area, though only one (P-27-003205) is located within the boundaries of one of the maintenance sites. Resource P-27-003205 consists of a possible burial site identified through soil analysis and cadaver dog investigation conducted as part of a modern criminal investigation. No remains were identified and the potential burial location may be of modern origin (Jordan 2014). No evidence of the site was found during the current pedestrian survey.

Based on the presence of archaeological sites nearby and the known history and sensitivity of the project vicinity, the study area is considered to have high sensitivity for archaeological resources. However, ground disturbance proposed under the SDMP would be minimal and targeted on recently accumulated sediments impeding the flow of the storm drainage system. Therefore, the limited ground disturbance and nature of sediments to be disturbed do not warrant archaeological testing. If ground disturbance extends beyond accumulated sediments and into native soils, archaeological and Native American monitoring would be required to reduce impacts to a less than significant level.

Some of the culverts in the area of potential effect (APE) may be over 50 years old or may reach 50 years of age during the five-year lifespan of the SDMP. The current project consists of the continued maintenance of the storm drainage features for the continued use of these features for their original and intended purpose. The culverts are not currently proposed to be removed as part of the SDMP and are therefore not anticipated to be impacted by maintenance activities. No recorded built-environment resources are present within the maintenance sites.

The following mitigation measures would reduce impacts to historical resources and archaeological resources to a less than significant level.

CUL-1 Archaeological and Native American Monitoring

Should any ground disturbance extend beyond the removal of recently accumulated sediments and into native soils (i.e., non-routine maintenance), those ground-disturbing activities shall be observed by a qualified archaeological monitor under the direction of an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for prehistoric archaeology (NPS 1983). If a cultural resource of Native American origin is discovered, monitoring activities shall be coordinated with an OCEN monitor or other Native American monitor. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area must halt and the find evaluated by a qualified archaeologist for listing in the CRHR and/or NRHP as applicable. Archaeological and Native American monitoring may be reduced or halted at the discretion of the monitors, as warranted by conditions such as encountering bedrock, excavating fill sediments, or observing negative findings during the first 60 percent of sediment removal. If monitoring is reduced to spot-checking, spot-checking shall occur when ground disturbance moves to a new location in the APE.

CUL-2 Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) shall be contacted immediately to evaluate the find. If the discovery proves to be eligible for listing in the CRHR and/or NRHP, additional work such as data recovery excavation may be warranted.

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c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission which would determine and notify a most likely descendant (MLD). The MLD must complete the inspection of the site and provide recommendations for treatment to the landowner within 48 hours of being granted access. With adherence to existing regulations, impacts to human remains would be less than significant. However, due to the proximity of Maintenance Site 21 to archeological site Resource P-27-003205, the OCEN tribe requested additional testing at Maintenance Site 21. Refer to Mitigation Measure CUL-3.

CUL-3 Extended Phase I Testing for Site 21

If any ground disturbance that extends beyond accumulated sediments into native soils, associated with the project activities at Site 21, is proposed within 50 feet of the boundary of P-24-003205, an Extended Phase I testing program (i.e., vertical auger boring) shall be implemented to identify the presence or absence of archaeological or human remains that may be impacted by the project. All archaeological excavation shall be observed by a local Native American monitor. If an archaeological site without human remains is identified during the testing, the site shall be evaluated for listing in the CRHR and/or NRHP. If the discovery proves to be eligible for listing in the CRHR and/or NRHP, additional work such as data recovery excavation may be warranted. If human remains are identified, the steps outlined in State of California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 as described above.

LESS THAN SIGNIFICANT IMPACT

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6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Implementation of the SDMP involves maintenance activities at drainage facilities throughout the City. Maintenance activities would require energy use to operate machinery, including a dump truck, loader, skid steer or bobcat, DR-mower, wood chipper, all-terrain vehicle, excavator, vactor, portable pump, and bulldozer. Maintenance activities would be completed annually at 29 sites for a period of five years, with work activities lasting between one day and two weeks per site, per year. Hand tools would be used when possible in order to avoid use of heavy machinery. No permanent, long-term, or substantial energy consumption would occur during or as a result of the project. Therefore, impacts related to wasteful, inefficient, or unnecessary consumption of energy resources would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The City of Monterey is part of Monterey Bay Community Power (MBCP), a regional Community Choice Energy project. MBCP was formed to provide locally-controlled, carbon-free electricity to residents and businesses in Monterey, San Benito, and Santa Cruz counties (MBCP 2019). The goals of MBCP are to increase utilization of renewable power, create local and sustainable energy sources, and create green jobs (City of Monterey 2019b).

Maintenance activities included in the project would be performed with a combination of hand-tools and heavy equipment. Energy used required to complete maintenance activities would be limited to the short-term use of equipment that requires gasoline or electricity. Heavy mechanical equipment could include the following: dump truck, loader, skid steer or bobcat, DR-mower, wood chipper, all-terrain vehicle, excavator, vactor, portable pump, and bulldozer. Mechanical equipment use would occur for a maximum of two weeks per site at the 29 sites targeted for annual maintenance.

Implementation of the SDMP would not involve the construction or modification of structures or other infrastructure that would require energy consumption. Due to the limited duration and scope of energy-consuming activity, substantial use of energy would not occur. Therefore, the project would not conflict with the goals of MBCP, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

The City of Monterey is situated in a seismically active area, adjacent to the boundary zone between the North American and Pacific tectonic plates (City of Monterey 2004). Map 11 in the City of Monterey General Plan Safety Element (2016a) identifies portions of the potentially active Navy, Berwick Canyon, and Chupines faults as occurring within the City's planning area. However, there are no known active faults, faults on which activity has occurred within the last 11,000 years, within the City (City of Monterey 2004). Furthermore, the City of Monterey is not located in an Alquist-Priolo Earthquake Fault Zone or in a Seismic Hazard Zone (DOC 2018b).

Some maintenance sites are located in close proximity to the faults described above. However, because no faults in the study area are active, there is minimal potential for surface rupture at any of the SDMP maintenance sites. Because implementation of the SDMP would not add any new structures, there would be no increased risks to human safety. Therefore, there would be no impact.

NO IMPACT

- a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

As described above, the study area is in a seismically active area where earthquakes can occur. Implementation of the SDMP would not result in the construction of any structures or facilities that would be occupied by people. Therefore, there would be no impact related to ground shaking.

NO IMPACT

- a.3. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

Liquefaction is the process by which soil is temporarily transformed to fluid form during intense and prolonged ground shaking or because of a sudden shock or strain. Liquefaction typically occurs in areas where the groundwater is less than 30 feet from the surface and where the soils are composed of poorly consolidated fine to medium sand. Settlement of liquefied sands following a liquefaction event can produce additional hazards.

The City of Monterey General Plan EIR (2004) identifies liquefaction as a secondary seismic hazard with the potential to cause damage to infrastructure and building foundations. However, none of the maintenance sites are within a Landslide and Liquefaction Zone, as mapped by the DOC CGS Information Warehouse (2018b). Furthermore, the SDMP involves the maintenance of existing drainage facilities, and does not include the construction of new structures, and there are no existing buildings on the maintenance sites. Therefore, implementation of the SDMP would not affect the liquefaction risks at the maintenance sites. There would be no impact.

NO IMPACT

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

A landslide is a movement of surface material down a slope. The geologic character of an area determines its potential for landslides; steep slopes, the extent of erosion, and the rock composition of a hillside all contribute to the potential for slope failure and landslides. Slope failure can be triggered by erosion or grading, saturation of marginally stable slopes by rainfall or irrigation, or shaking of marginally stable slopes during earthquakes.

The City of Monterey General Plan (2016a) identifies landslides as a major geologic hazard within the City's planning area, and includes goals and policies limiting and regulating development on hillsides. Implementation of the SDMP would include work on slopes, as many of the maintenance sites consist of ravines and canyons with sloping banks. However, maintenance activities would not involve construction or grading. Mowing and removal of vegetation would be selectively performed to remove stormwater flow impediments while maintaining soil stability. When necessary, repair and replanting of eroded areas would be included in the scope of work at some sites. Therefore, impacts related to landslides would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

Urban development in the City of Monterey has resulted in increased erosion and sediment transport (City of Monterey 2004). The Public Facilities Element of the City of Monterey General Plan (2016a) states that land use should be planned in a way that protects water bodies by minimizing erosion.

Implementation of the SDMP would include sediment removal and trimming/removal of vegetation, including trees, that impedes stormwater flow or access to a site. Each site includes a drainage channel. Maintenance activities on the banks of drainage channels could destabilize and erode the soil, leading to loss of topsoil and siltation in the channel.

To minimize erosion and loss of topsoil, the SDMP states that vegetation removal would be performed selectively and only when necessary to remove material that impedes flow or access. In most instances, hand tools would be used, rather than heavy machinery, to avoid major disturbances to bank stability. Following maintenance activities, site close-out activities would include installation of erosion control devices such as straw wattles, geotextile blankets, hydroseed, and securing the site from public access.

Because the SDMP includes the management practices described above to limit erosion and loss of topsoil, this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

Landslide, lateral spreading, subsidence, liquefaction, and collapse are events that occur when natural phenomena, such as an earthquake, causes a mass of soil to lose cohesion or stability, causing shifting or sliding of the soil, or when human-caused ground disturbance causes the same effects. The City of Monterey General Plan EIR (2004) identifies unreinforced masonry buildings and new development on unconsolidated soils as threats to public safety from earthquake events, and

states that conformance to the Uniform Building Code is the most widespread mitigation against seismic hazards.

The City of Monterey is underlain by the Salinian Block, a major geologic feature consisting mostly of granite, which was likely displaced by large lateral movements on the San Andreas Fault System (Ross 1983). Soil types in the City include unconsolidated dune sands along the coast, and exposed granite and sandstone (City of Monterey 2004). According to the USDA Web Soil Survey, the study area overlaps the following 14 soil map units: Arnold Loamy Sand; Baywood Sand; Chamise Channery Loam; Rindge Muck; Santa Lucia Channery Clay Loam; Santa Ynez Fine Sandy Loam; Santa Ynez Fine Sandy Loam (two to nine percent slopes); Santa Ynez Fine Sandy Loam (15 to 30 percent slopes); Elder Very Fine Sandy Loam; Xerorthents, Loamy; Narlon Loamy Fine Sand, 2 to 9 percent slopes; Narlon Loamy Fine Sand, 15 to 30 percent slopes; Sheridan Coarse Sandy Loam; Gazos Silt Loam; and water (USDA 2017).

Proposed maintenance activities would consist of minor disturbances to the banks and beds of drainage channels during removal of sediment and clearing of vegetation. However, maintenance activities do not include any substantial ground disturbances such as grading or construction. While some maintenance activities could occur on unconsolidated soils, no development would occur that would exacerbate existing risks. As described above, the study area is not in a Landslide and Liquefaction Zone. The erosion control measures included in the SDMP include using hand tools to minimize bank disturbance, erosion control devices (straw wattles, geotextile blankets, and hydroseed), and securing the site from public access. These measures would reduce impacts related to soil instability to a less than significant level.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

Expansive soils are generally clay soils that are prone to significant changes in volume based on their water content. The expansion and shrinking of soil is of concern when building structures that could suffer foundational damage due to this process. According to the City of Monterey General Plan EIR (2004), the soil type found in the City with the greatest expansion potential is the Narlon Series soils, with moderate expansion potential.

Proposed maintenance activities would encounter soil types with low to moderate expansion potential. However, the SDMP does not include any new structures or substantial ground disturbance. Therefore, the existing degree of soil expansion that occurs in the study area would not be exacerbated by SDMP activities, nor would the risk exposure of life or property be increased. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The project does not involve the use of septic tanks or other alternative wastewater disposal systems. The project involves maintenance activities of the existing stormwater drainage system. There would be no impact.

NO IMPACT

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

A Paleontological Resources Assessment was prepared for the SDMP in December 2018, and is included as Appendix E. The assessment evaluated the paleontological resource potential of the study area in accordance with the professional standards of the Society of Vertebrate Paleontology. The assessment found that the study area is underlain by Cretaceous granodiorite, the Miocene Monterey Formation, Pleistocene marine terrace deposits, and Holocene surficial deposits. No vertebrate fossil localities have been previously recorded within any of the maintenance sites, but at least one vertebrate locality was recorded in the immediate vicinity on the Monterey Peninsula. At least seven additional localities have been previously recorded nearby, yielding significant fossilized specimens of marine mammals and fish. Due to previous finds, several geologic units in the study area are determined to have a high potential for paleontological resources.

Despite the high potential for paleontological resources in the study area, typical SDMP maintenance activities would be unlikely to unearth a resource, as the SDMP does not include substantial excavation or ground disturbance. However, if ground disturbance is required beyond recently accumulated sediments into native sediments, the potential exists for such activities to uncover or destroy a unique paleontological resource. Therefore, the following mitigation measures are required.

GEO-1 Paleontological Monitoring

Should any ground disturbance extend beyond the removal of recently accumulated sediments and into native sediments determined to have a high paleontological resource potential for the maintenance activities included in the SDMP, those ground-disturbing activities shall be observed by a paleontological monitor under the direction of a qualified paleontologist meeting the qualifications set forth by the Society of Vertebrate Paleontology (2010). The same monitor may perform monitoring for mitigation measures GEO-1 and CUL-1, if qualifications suffice. Paleontological monitoring may be reduced or halted at the discretion of the qualified paleontologist, if after 50 percent of excavations are complete and no fossils of any kind have been discovered. If monitoring is reduced to spot-checking, spot-checking shall occur when ground disturbance moves to a new location or impacts a different geologic unit that is determined to be sensitive for paleontological resources.

GEO-2 Unanticipated Discovery of Paleontological Resources

If paleontological resources (a fossilized bone or other preserved plant or animal remains recognized by work crews or monitors) are encountered during ground-disturbing activities, work in the immediate area shall halt until the find is assessed for scientific significance and collected. Staff performing maintenance activities shall contact the City of Monterey. If a qualified paleontologist meeting the qualifications set forth by the Society of Vertebrate Paleontology (SVP 2010) was not already contracted, one shall be contracted in the event that a paleontological resource is encountered. The qualified paleontologist will have authority to determine when work can be resumed following the discovery of a paleontological resource.

Once salvaged, significant fossils shall be prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection. A copy of a final report describing the results of the paleontological mitigation monitoring efforts shall also be submitted to the curation facility.

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8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Conflict with any applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Climate change is the observed increase in the average temperature of the earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming during the past 150 years. Per the United Nations Intergovernmental Panel on Climate Change (IPCC), the understanding of anthropogenic warming and cooling influences on climate has led to a high confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-twentieth century (IPCC 2007).

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), fluorinated gases such as hydrofluorocarbons (HFC) and perfluorocarbons (PFC), and sulfur hexafluoride (SF₆). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases and SF₆ (USEPA 2018a). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO₂e), and is the

amount of a GHG emitted multiplied by its GWP. CO₂ has a 100-year GWP of one. By contrast, CH₄ has a GWP of 25, meaning its global warming effect is 25 times greater than CO₂ on a molecule per molecule basis (IPCC 2007).

In response to an increase in man-made GHG concentrations over the past 150 years, California implemented Assembly Bill (AB) 32, the “California Global Warming Solutions Act of 2006.” AB 32 codified the statewide goal of reducing emissions to 1990 levels by 2020 (essentially a 15 percent reduction below 2005 emission levels) and adopted regulations to require reporting and verification of statewide GHG emissions.

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, which requires the state to further reduce GHGs to 40 percent below 1990 levels by 2030. SB 32 extends AB 32, directing CARB to ensure that GHGs are reduced to 40 percent below the 1990 level by 2030. On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) CO₂e by 2030 and two MT CO₂e by 2050 (CARB 2017b). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the state.

The vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project’s contribution towards an impact would be cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

The City of Monterey adopted its Climate Action Plan (CAP) in March 2016 and set targets of reducing GHG emissions by 15 percent below 1990 levels by 2020 and 25 percent below 1990 levels by 2030 (City of Monterey 2016b). The CAP includes a GHG emissions inventory for government operations that covers emissions from buildings and facilities, streetlights and traffic signals, vehicle fleet, employee commutes, and wastewater treatment facilities. However, the inventory does not include GHG emissions from construction equipment that would be utilized for storm drain maintenance activities (City of Monterey 2016a). Therefore, the GHG analysis of the project cannot be streamlined via CEQA Guidelines Section 15183.5. Because the City of Monterey does not have a “qualified” GHG reduction plan, this analysis evaluates the project for consistency with the 2017 Scoping Plan to determine whether GHG emissions generated by implementation of the SDMP would be significant. According to the 2017 Scoping Plan, “absent conformity with an adequate geographically-specific GHG reduction plan...CARB recommends that projects incorporate design features and GHG reduction measures, to the degree feasible, to minimize GHG emissions” (CARB 2017b).

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*
- b. *Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Maintenance activities would generate GHG emissions through the burning of fossil fuels and other emission sources required for operation of heavy equipment, motor vehicles, and worker trips, thus potentially contributing to cumulative impacts related to climate change. Emissions sources would include heavy construction equipment, motor vehicles, and worker trips to and from the site.

Project emissions were estimated using CalEEMod version 2016.3.2 and the assumptions outlined in Section 3, *Air Quality*. Maintenance activities would require between one day to two weeks per site. Daily emissions from maintenance activities at one site were modelled, then multiplied by 29 to estimate minimum annual GHG emissions (maintenance occurring for one day per site each year) and by 260 to conservatively estimate maximum annual GHG emissions (maintenance occurring on all week days each year). Therefore, based on CalEEMod results, the project would generate between approximately 75 MT of CO₂e per year and approximately 670 MT of CO₂e per year. However, this analysis does not utilize a numeric threshold to determine the significance of GHG emissions from implementation of the SDMP. Rather, as discussed above, the significance of the project's GHG emissions is determined based on whether the project is consistent with the goals of applicable state and local GHG reduction plans, consistent with CEQA Guidelines Section 15064.4(b)(3).

The City of Monterey CAP does not identify any GHG reduction measures that would apply to the proposed project. However, the 2017 Scoping Plan provides GHG reduction goals that can be incorporated at the project level. Therefore, as mentioned above, this analysis evaluates the project for consistency with the 2017 Scoping Plan. Table 7 lists the project-level GHG reduction features that could feasibly be included in the proposed project and provides discussions of the project's consistency with each goal. The project would not alter the operation of existing storm drain infrastructure, and no change in operational GHG emissions from the storm drain system would occur. Therefore, this analysis focuses only on emissions from the proposed maintenance activities.

Table 7 Consistency with the 2017 Scoping Plan

Goals, Policies, and Actions for Construction Activities	Project Consistency
<p>1. Goal: Minimize waste and emissions from construction and materials</p> <ul style="list-style-type: none"> a. Divert and recycle construction and demolition waste, and use locally-sourced building materials with a high recycled material content to the greatest extent feasible 	<p>Consistent - The SDMP would not include activities that would generate construction and demolition waste because maintenance activities would include removal of existing solid waste from the environment at maintenance sites.</p>
<p>2. Goal: Promote use of lower-emission construction equipment and vehicles</p> <ul style="list-style-type: none"> a. Enforce idling time restrictions for construction vehicles b. Require construction vehicles to operate with the highest tier engines commercially available c. Utilize existing grid power for electric energy rather than operating temporary gasoline/diesel powered generators d. Increase use of electric and renewable fuel powered construction equipment and require renewable diesel fuel where commercially available e. Require diesel equipment fleets to be lower emitting than any current emission standard 	<p>Inconsistent – The project does not include specific standards or restrictions for heavy construction equipment, such as limiting idling times and using lower-emission construction equipment. Therefore, implementation of Mitigation Measure GHG-1 would be required to achieve consistency with this goal.</p>
<p>3. Goal: Promote carbon sequestration and mitigate on-site sequestration impacts</p> <ul style="list-style-type: none"> a. Minimize tree removal, and mitigate indirect GHG emissions increases that occur due to vegetation removal, loss of sequestration, and soil disturbance 	<p>Consistent – Maintenance activities would include the removal of overgrown vegetation from storm drain facilities, which would result in a minor quantity of indirect GHG emissions due to the loss of sequestration and soil disturbance. However, the project would be required to implement Mitigation Measures BIO-2, BIO-3, BIO-7, and BIO-9. These mitigation measures would minimize tree removal and the resultant indirect GHG emissions by requiring the replacement of special status plants at a minimum 1:1 ratio, the replacement of Monterey pine and Monterey cypress trees at a 2:1 ratio at 18 locations, the protection of wetland vegetation to the maximum extent feasible, and the restoration of jurisdictional wetland areas.</p>

Source: CARB 2017b, Appendix B

Mitigation Measure GHG-1 is required to ensure consistency with project-level measures contained in Appendix B of the 2017 Scoping Plan. Therefore, impacts related to GHG emissions would be less than significant with mitigation incorporated.

GHG-1 Construction Equipment

Heavy-duty construction equipment shall not idle for more than three minutes. Wherever feasible, existing grid power shall be utilized for electricity. In addition, wherever feasible, maintenance activities shall utilize equipment powered by electricity or renewable fuels.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

The proposed project would involve maintenance of the City's existing storm drainage system. Urban runoff that flows through a storm drainage system typically contains potential contaminants including pesticides, fertilizers, detergents, animal feces, and automotive residues. Exposure to these types of contaminants would have the potential to cause a significant impact to the public or the environment. Proposed maintenance activities would improve the efficiency of drainage facilities by reducing impediments to flow, decreasing the likelihood that stormwater would overflow and run outside of the drainage system. Therefore, the potential for urban runoff to create a hazard to the public would be decreased.

Maintenance activities would not involve the use of hazardous materials other than routine materials required to run machinery, such as gasoline. The transport, use, and storage of hazardous materials during project activities would be conducted in accordance with all applicable state and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22. Therefore, the proposed project would not create a substantial hazard to the public through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

There are several schools within 0.25 mile of proposed maintenance sites, including: Foothill Elementary School at 1700 Via Casoli; Monte Vista Elementary School at 251 Soledad Drive; Walter Colton Middle School at 100 Toda Vista; Monterey High School at 101 Hermann Drive; Christian Trinity High School at 680 Belden Street; and the Middlebury Institute of International Studies at 425 Van Buren Street.

SDMP maintenance activities would be performed with hand tools or heavy machinery. As described above, the use of acutely hazardous materials would not be required. Impacts to schools would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project be located on a site included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

On July 2018, the following databases were reviewed for known hazardous materials contamination in the vicinity of the study area pursuant to Government Code Section 65962.5:

- SWRCB Geotracker (2019)
- Department of Toxic Substances Control (DTSC) EnviroStor Database (2019)

- USEPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Superfund Site database (2018b)

The USEPA CERCLIS database identified one superfund site in the study area, the Presidio of Monterey at 1759 Lewis Road. The SWRCB Geotracker Database indicates occurrence of more than 30 leaking underground storage tank (LUST) cleanup sites, seven cleanup program sites, four military cleanup sites, and one waste discharge requirement (WDR) site within approximately 0.25 mile of SDMP maintenance sites. The majority of the cleanup cases addressing these sites are closed.

Table 8 lists cleanup sites with open hazardous material cases listed in the databases described above.

Table 8 Hazardous Materials Sites

Geotracker Site	Geotracker Code	Address	Status
LUST Sites			
Chevron Service #91060	T0605300400	351 Fremont Street	Open – eligible for closure
Del Monte Aviation	T10000004639	100 Sky Park Drive	Open – verification monitoring
Tosco – Facility #5643	T060530019	1401 Munras Ave	Open – verification monitoring
Cleanup Program Sites			
Del Monte Shopping Center	SL203261264	1410 Del Monte Center	Open – verification monitoring
Washington Mutual Bank – Monterey	T0605397777	468 Washington Street	Open – verification monitoring
One Hour Martinizing	SLT3S5631371	724 Lighthouse Avenue	Open – remediation
Russo’s Marine Fueling Station	SLT3S5671374	Del Monte and Figueroa	Open – assessment and interim remedial action
Sudden Service/Vapor Dry Cleaners	T0605399983	951 Del Monte Avenue	Open – remediation
Military Cleanup Sites			
Presidio of Monterey	T0605311482	P.O. Box 5004 (Mason Road)	Open – verification monitoring
Monterey Naval Post Graduate School	T0605365261	1 University Circle	Open – inactive
Waste Discharge Requirement Sites			
Collection WDR	WDR100033592	City Hall, 580 Pacific Street	Historical – WDR
Laguna Seca Golf Ranch	WDR100030472	10520 York Road	Historical – WDR

Geotracker Site	Geotracker Code	Address	Status
Envirostar Site	Envirostar Code	Address	Status
Owl Cleaners	60002357	153 Webster Street	Active as of 5/17/2016
PG&E, Monterey MGP	60000711	Southwest corner of Figueroa Street and Del Monte Avenue	Active as of 9/18/2007
Presidio of Monterey	27290004	Lighthouse Avenue and Kit Carson Road	Refer: RWQCB as of 7/22/1997
Monterey Naval Post Graduate School	71000050	1 University Circle	Refer: RWQCB as of 3/14/2011
Monterey Peninsula Airport	70000005	200 Fred Kane Drive	Refer: RWQCB as of 3/8/2006
Superfund Site	EPA ID	Address	Status
Presidio of Monterey	CA0210090080	1759 Lewis Road	Non- National Priorities List; Fed Fac Preliminary Assessment Review Start Needed

Source: SWRCB Geotracker Database 2019, DTSC Envirostor Database 2019, and USEPA Cerclis Database 2018b.

The proposed SDMP maintenance activities generally involve only superficial ground disturbance, as needed to remove sediment and debris from drainage facilities. Therefore, hazardous waste sites of concern for the SDMP are limited to those in the immediate vicinity of maintenance sites. However, non-routine maintenance activities could potentially include removal and/or disturbance of soil at a greater depth.

The two cleanup sites nearest to a proposed maintenance site are: Tosco Facility – 5643 (T060530019) and the Del Monte Shopping Center (SL203261264). Both sites are within the immediate vicinity of Site 20, Majors Creek. The potential contaminant of concern at site T060530019 is gasoline, and the potential contaminants of concern at site SL203261264 are copper, other chlorinated hydrocarbons, other solvents or non-petroleum hydrocarbons: tetrachloroethylene, trichloroethylene, and vinyl chloride. The cases at both sites are currently in verification monitoring phases. Contamination of surface water has been dismissed and surface water sampling has been discontinued by regulatory agencies at both sites. Although surface water and sediment in the channel are not expected to be impacted, soil and groundwater are media of concern at Site 20. Therefore, soil and groundwater could pose a health risk to workers performing maintenance activities that involve the disturbance of these media. To reduce health risks to a less than significant level, mitigation measure HAZ-1 is required to reduce impacts to a less than significant level.

HAZ-1 Soil and Groundwater Management Plan (Site 20)

If non-routine maintenance activities at Site 20 will include removal and/or disturbance of soil at a depth of greater than 0.5 feet below grade or groundwater, a soil and groundwater management plan shall be developed for potential exposure to gasoline service station and dry cleaner chemical constituents. The plan shall include information regarding site worker health and safety; management of impacted groundwater onsite; management of soil disturbance onsite; laboratory

testing of groundwater and soil samples; and handling and disposal of impacted soil or groundwater.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- e. *For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

Monterey Regional Airport is adjacent to the City of Monterey to the east, framed by SR 68 to the south and west, and Canyon Del Rey Boulevard to the north and east. The Airport Land Use Compatibility Plan Update (2017) provides maps, including noise contour maps, to guide land use planning in the vicinity of the airport.

Maintenance Sites 22, 23, 27, 28, 29, 30, 31, 33, and 34 are within two miles of the airport. The site nearest to the airport is Site 33, approximately 0.4 mile from the nearest runway. All maintenance sites are within the Airport Influence Area (AIA) Zone, but are outside of all mapped noise contour boundaries for the airport (Monterey County Airport Land Use Commission 2017).

The Airport Land Use Commission encourages local governments to submit the following types of development proposals or other actions within the AIA for advisory review (Monterey County Airport Land Use Commission 2017): commercial or mixed use development of more than 100,000 square feet of gross building area, residential or mixed-use development that includes more than 50 dwelling units, schools, medical facilities, libraries, places of public assembly, towers, and adoption of a planning document, ordinance, or building regulation. Implementation of the SDMP would not include any action that requires approval from the Airport Land Use Commission. The SDMP does not include construction of new structures or changes in zoning at any maintenance site. The use of machinery during project activities could potentially cause temporary noise disturbance, as described in Section 13, *Noise*. However, no maintenance sites are within the mapped noise contour boundaries of the airport, and noise associated with maintenance activities would be limited and temporary. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- f. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The City of Monterey General Plan (2016a) identifies SR 1 Northbound, SR 1 Southbound, and SR 68 Eastbound as evacuation routes. Some proposed maintenance activities would involve the use of dump trucks, City vehicles, and heavy equipment. The transportation and parking of vehicles for maintenance activities could slow traffic, and establishment of detour routes may be necessary in some instances. However, maintenance activities are not expected to impact large areas, and would be completed within a maximum two weeks per site, per year. Implementation of the SMDP would not include large capital improvement projects. Therefore, the duration or intensity of any disruption to traffic would not be substantial, and would not interfere with emergency response or evacuation plans. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

Implementation of the SDMP would not include the construction of new structures. Some maintenance activities would involve work crews working in wooded areas, but none of the maintenance sites are remote or difficult to access from existing roads. Exposure to wildland fires at the maintenance sites would not be greater than exposure elsewhere in the City, and maintenance activities would not exacerbate the sites' fire hazard potential. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Implementation of the SDMP would not introduce pollutants or new sources of wastewater into the City's surface waters or groundwater.

To determine the location and extent of waters and wetlands that are potentially subject to regulation under the federal Clean Water Act (CWA), State Porter-Cologne Water Quality Control Act, and the California Fish and Game Code, Rincon conducted a Jurisdictional Waters and Wetland Delineation (JD) on behalf of the City. The JD, included as Appendix C, identified jurisdictional areas throughout the study area. Any proposed activities in jurisdictional waters or wetlands may be subject to the permit requirements of USACE under Section 404 of the CWA, Central Coast RWQCB under Section 401 of the CWA and under the Porter-Cologne Water Quality Control Act, and/or the CDFW pursuant to Section 1600 et seq. of the California Fish and Game Code. Avoidance of jurisdictional waters would not be possible during implementation of the SDMP. Therefore, permits from applicable agencies are required prior to impacting waters. Maintenance activities at jurisdictional waters sites, known as "waters of the United States," would require approval from the USACE, RWQCB, and/or CDFW. For maintenance activities at sites in the Coastal Zone, a Coastal Development Permit would be required. Table 4 of the JD (Appendix C) lists the potential jurisdictions of each maintenance site, and Table 9 below lists the permits that may be required to perform maintenance activities at some sites. Compliance with the permits listed in Table 8 would require coordination with the responsible agency to ensure that the agency grants permission to perform work on the site, and that environmental impacts are minimized.

Table 9 Permit Requirements and Approvals for SDMP Activities

Permit/Approval	Responsible Agency	Conditions
404 Permit	USACE	Required for maintenance that would affect “waters of the United States” and associated wetlands. This permit quantifies the area where impacts will occur within jurisdictional features and describes the project activity(ies). These activities are typically covered by a Nationwide Permit(s). Conditions of the permit protect water quality by placing restrictions on when and how the work can be completed, such as not allowing heavy equipment to work in flowing water. Conditions also reduce impacts and often address avoidance of special-status species, including pre-construction surveys or avoiding work in certain habitat.
Section 401 Water Quality Certification	RWQCB	Required for maintenance that would affect waters of the State, and wetlands, including lakes, and streambeds. This permit quantifies the area where impacts will occur within jurisdictional features and describes the project activity(ies). Conditions of the permit protect water quality by placing restrictions on when and how the work can be completed, such as not allowing heavy equipment to work in flowing water. Conditions also reduce impacts and often address avoidance of special-status species, including pre-construction surveys or avoiding work in certain habitat.
1605 Streambed Alteration Agreement	CDFW	Required for maintenance that would impact lakes, streambeds or riparian habitat areas. Documents impacts to streams, lakes and associated riparian habitat. Conditions of the agreement reduce and avoid impacts to special-status species and habitats that support them, often requiring pre-construction surveys and/or biological monitoring.
National Pollutant Discharge Elimination System Permit (NPDES)	RWQCB	Required for maintenance that could impact water quality. Involves planning and implementing erosion control and best management practices.
Wastewater Discharge Regulations	RWQCB	Required when dewatering would occur. Dewatering is necessary when water within a drainage facility must be removed in order to accomplish maintenance tasks.
Coastal Development Permit (CDP) ¹	California Coastal Commission	Required for maintenance within the Coastal Commission Permit jurisdiction and the Deferred Certification Areas of the Coastal Zone

¹ Coastal Development Permits required for City of Monterey and City of Seaside SDMP maintenance sites
Source: City of Monterey SDMP (2019)

Compliance with the regulatory permit requirements described in Table 9 above would ensure that the maintenance activities proposed by the SDMP would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

Proposed maintenance activities would remove impediments to efficient stormwater drainage. Implementation of the SDMP would not draw groundwater, directly intrude into the groundwater table, or add impermeable surfaces that would interfere with groundwater recharge. Maintenance activities would decrease the likelihood of stormwater overflowing from drainage facilities and flooding adjacent surfaces. Groundwater recharge would be slightly altered by removing sediment and other flow impediments, improving the drainage system's capacity to carry stormwater. These effects would be beneficial to the basin's groundwater management. Therefore, there would be no impact.

NO IMPACT

- c.(i) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*

Implementation of the SDMP would not add impervious surfaces or alter the course of a stream or river. The drainage patterns surrounding maintenance sites would be slightly altered by increasing the capacity and/or efficiency of stormwater facilities, preventing the likelihood of flooding. Vegetation removal would occur when necessary to remove flow impediments or improve access to a facility. Removing vegetation could result in erosion and siltation, allowing destabilized soil to flow down the bank and into the drainage facility. However, maintenance work would include, when necessary, installation of erosion control devices and/or replanting of eroded areas. These measures would ensure that erosion and siltation effects are temporary and minor. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c.(ii) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*
- c.(iv) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would impede or redirect flood flows?*

Implementation of the SDMP would not add impervious surfaces or alter the course of a stream or river. By removing impediments to the flow of stormwater through drainage facilities, the capacity of the drainage system would increase. Flood flows would not be impeded or redirected; rather, floodwater would more efficiently move through the drainage system as a result of SDMP maintenance. Incidences of overflow would be less likely, decreasing the rate and amount of runoff

outside of drainage channels. Because the changes to the study area's drainage pattern would be beneficial, there would be no impact.

NO IMPACT

- d. *Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

According to the DOC Inundation Map for Emergency Planning (2009), the City's coast is within a Tsunami Inundation Area. The northern portion of the City contains areas that are also designated as Special Flood Hazard Areas by the Federal Emergency Management Agency (FEMA) Flood Map Service Center (FEMA 2017). Some of the maintenance sites are within or near the Tsunami Inundation Area and Special Flood Hazard Areas; Sites 29, 30, 31, and 34 at Laguna Grande Lake are within the Tsunami Inundation Area, and Sites 22 and 23 are within 0.4 mile of the Special Flood Hazard Area at El Estero Lake.

In the event of a tsunami or flood, pollutants could flow into and out of the City's stormwater drainage facilities. However, by removing flow impediments that could result in flooding, the SDMP would reduce water pollution risks associated with inundation. Further, management of vegetation along the banks of drainage facilities would improve water filtration, and removal of litter would reduce pollution of stormwater. Because the project would have a beneficial impact on risks related to flooding and pollution, there would be no impact.

NO IMPACT

- e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The Central Coast RWQCB Water Quality Control Plan for the Central Coastal Basin (2017) is the water quality control plan applicable to the Cities of Monterey and Seaside, outlining water quality management practices for surface water and groundwater. The Water Quality Control Plan describes waste discharge requirements and requirements for NPDES permitting. The SDMP includes these permitting requirements, which require permission from the RWQCB prior to activity that could impact water quality.

SDMP maintenance activities would improve the function of the City's stormwater drainage system, resulting in a more efficient transmission of stormwater. Removing impediments to flow would decrease instances of overflow, potentially decreasing the amount of stormwater that contributes to groundwater recharge. However, the purpose of the stormwater drainage system is to convey stormwater and urban runoff downstream, protecting property from flooding. The drainage facilities included in the SDMP are not designed to contribute to groundwater recharge by flooding adjacent properties. Therefore, implementation of the SDMP would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a. *Would the project physically divide an established community?*

Maintenance activities would occur at established drainage sites. SDMP implementation would not include new structures, roads, or other features that would divide an established community. There would be no impact.

NO IMPACT

b. *Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

Implementation of the SDMP would not change the existing land use at maintenance sites or require changes to any zoning designations. The SDMP is consistent with applicable plans, policies, and regulations, as shown in Table 10 below.

Table 10 Consistency Review

City of Monterey Policy	SDMP Consistency
Monterey City Code Chapter 37: Preservation of Trees and Shrubs	Consistent. As described in Section 1, <i>Aesthetics</i> , any tree removal occurring as part of SDMP maintenance activities would require a permit from the City Forester. Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-7 would address impacts to special status trees and other vegetation.
Monterey City Code Chapter 38: Zoning Ordinance	Consistent. Implementation of the SDMP would not require changes in land use or zoning, or cause a public nuisance, as defined in the Zoning Ordinance. As described in Section 13, <i>Noise</i> , maintenance activities would be subject to the City's noise and vibration standards. Mitigation Measure N-1 would reduce noise impacts to a less than significant level.
General Plan Historic Preservation Element Goal a. Preserve historic and cultural resources in Monterey, including buildings, sites, landscapes, artifacts, and memories.	Consistent. As described in Section 5, <i>Cultural Resources</i> , and Section 7, <i>Geology and Soils</i> , maintenance activities would occur at sites with high sensitivity or potential regarding historic, cultural, and paleontological resources. Mitigation Measures CUL-1, CUL-2, GEO-1, and GEO-2 would be required to reduce impacts to a less than significant level.
General Plan Public Facilities Element Goal I. Continue to improve drainage and urban runoff quality throughout the City and maintain Monterey's status as a regional lead agency for storm water management programs.	Consistent. The SDMP is a plan for improving drainage facilities throughout the City. As described in Section 7, <i>Geology and Soils</i> , the SDMP includes measures to prevent erosion and protect water quality.
Source: Monterey City Code (2018) and City of Monterey General Plan (2016)	

With incorporation of the mitigation measures listed in Table 10 above, implementation of the SDMP would not conflict with any plan, policy, or regulation adopted to mitigate an environmental effect.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

There are no mineral resources of economic value classified under the Surface Mining and Geology Act within the City, or minerals of local importance (City of Monterey 2016a). Removal of sediment as part of SDMP implementation would not result in the loss of mineral resources. Therefore, there would be no impact.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz and less sensitive to low frequencies (below 100 Hertz).

Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. Thus, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease (Crocker 2007).

Human perception of noise has no simple correlation with sound energy. The perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., 2x the sound energy); that a change of 5 dBA is readily perceptible (8x the sound energy); and that an increase (decrease) of 10 dBA sounds twice (half) as loud (10.5x the sound energy) (Crocker 2007).

Sound changes both in level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in level as the distance from the source increases. The manner in which noise reduces with distance depends on the important factors, including the type

of sources, i.e. point or line, the path the sound will travel, site conditions and obstructions. Noise levels typically attenuate, or drop-off, at a rate of 6 dBA per doubling of distance (6dBA/DD) from a point source, such as industrial machinery. Noise levels may be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features such as hills and dense woods, as well as man-made features such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5 dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Based on the FHWA’s Highway Traffic Noise: Analysis and Abatement Guidance, typical construction generally provides a reduction of exterior-to-interior noise levels of about 20 to 35 dBA with closed windows (FHWA 2011).

One of the most frequently used noise metrics that considers both duration and sound level is the equivalent noise level (L_{eq}). L_{eq} is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time. The period of time averaging may be specified; $L_{eq(3)}$ would be a three-hour average. When no period is specified, a one-hour average is assumed. It is important to understand that noise of short duration, that is, times substantially less than the averaging period, may have minimal effect on a one-hour sound level.

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas sound is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise (e.g., the rattling of windows from passing trucks). This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is measured in vibration decibels (VdB).

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources inside buildings such as the operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads.

The City of Monterey General Plan Noise Element (2016a) identifies motor vehicles and aircraft as the primary noise sources within the City. The Noise Element includes the following goals:

- Minimize traffic noise in predominantly residential areas and ensure noise in commercial areas is at an acceptable level
- Encourage quiet neighborhoods
- Allow new construction only where existing or projected noise levels are acceptable or can be mitigated

Chapter 38.111 of the City of Monterey Ordinance Code provides performance standards for noise as shown in Table 11. The Code states that noise levels shall be compatible with neighboring uses and shall not create ambient noise levels that exceed the standards in Table 11.

Table 11 City of Monterey Zoning Ordinance: Sound Level Limits by Zone

Zone	Maximum Decibel Noise Level (Db)
Open Space (OS) District	60
Residential (R) District	60
Public and Semi-Public District	60
Commercial District (C)	65
Industrial District (I)	70
Planned Development (PD)	Study Required

Notes: in R districts, the noise standard shall be 5 Db lower between 10:00 p.m. and 7:00 a.m.; noise that is produced for no more than a cumulative period of five minutes in any hour may exceed the standards above by 5 Db; noise that is produced for no more than a cumulative period of one minute in any hour may exceed the standards above by 10 Db.

Source: City of Monterey Zoning Ordinance (2019) Section 38-111

- a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

As described in Section 17, *Transportation*, implementation of the SDMP is expected to add less than one trip per day to local roadways. Therefore, there would be no substantial increase in traffic-related noise. Instead, noise associated with implementation of the SDMP would be generated by heavy machinery used during maintenance activities. Table 12 shows the typical noise levels of machinery that would be used to conduct SDMP maintenance activities at 50, 100, and 200 feet from the source.

Table 12 Typical Noise Levels from Equipment at Maintenance Sites

Equipment	Typical Noise Level (dBA)		
	50 feet from Source	100 feet from Source	200 feet from Source
Backhoe	80	74	68
Dozer	85	79	73
Saw	76	70	64
Shovel (excavator)	82	76	70
Loader	80	74	68
Truck	84	78	72

Source: Federal Transit Administration (FTA), September 2018

As shown in Table 12, maintenance activities could generate noise up to 85 dBA L_{eq} at 50 feet from the source. Maintenance sites are distributed throughout the City, including in or near residential, commercial, and open space. Therefore, maintenance activities could occur within 50 feet of sensitive uses, including residences. For example, Sites 2 and 3 are culverts of a stream that runs parallel to Madison Street in a residential neighborhood. Maintenance activities at these sites would occur within 50 feet of residences. In these instances, use of heavy machinery could exceed the

sound level limits shown in Table 11. Maintenance work at a given site would last for a maximum of two weeks per site. Within the maximum two week period, heavy machinery use would occur intermittently, when necessary. Heavy machinery would be used only for tasks that cannot be performed with hand tools. Maintenance work would comply with City of Monterey Municipal Code Zoning Ordinance, Section 38-112.2, which limits construction hours to between 7:00 a.m. and 7:00 p.m. on weekdays, 8:00 a.m. to 6:00 p.m. on Saturdays, and 10:00 a.m. to 5:00 p.m. on Sundays. Under Section 38-111 of the Municipal Code, the Public Works Director may require an acoustic study and/or noise attenuation measures for any project that could exceed sound level limits. Therefore, the SDMP would be subject to approval by the Public Works Director. Although construction noise would be limited to the hours specified by the Municipal Code, noise from maintenance activity may still exceed the City's noise standards at nearby receptors. Therefore, Mitigation Measure N-1 is required to reduce noise impacts to sensitive receptors to a less than significant level.

N-1 Equipment Noise Reduction

The following measures shall be implemented during maintenance activities occurring as part of implementation of the SDMP:

- **Mufflers.** All heavy machinery, fixed or mobile, shall be operated with closed engine doors and shall be equipped with properly operating and maintained mufflers consistent with manufacturers' standards.
- **Stationary Equipment.** All stationary maintenance equipment shall be placed so that emitted noise is directed away from the nearest sensitive receptors.
- **Equipment Staging Areas.** Equipment staging shall be located in areas that will create the greatest distance feasible between maintenance-related noise sources and noise-sensitive receptors.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

The City of Monterey Municipal Code Section 38-111(B) prohibits use, activity, or processes that would produce vibrations perceptible without instruments by a reasonable person at the property lines of a site. The vibration velocity level threshold of perception for humans is approximately 65 VdB (FTA 2018). The only piece of vibratory equipment used in the SDMP would be a bulldozer, which would generate 48 VdB within 50 feet of the source (FTA 2018). This is below the threshold of 65 VdB; as such, this impact would be less than significant.

NO IMPACT

- c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

All described in Section 9, *Hazards and Hazardous Materials*, all SDMP maintenance sites are within the Monterey Regional AIA Zone, but are outside of all mapped noise contour boundaries for the airport (Monterey County Airport Land Use Commission 2017). Nine sites are within two miles of

the airport. The site nearest to the airport is Site 33, approximately 0.4 mile from the nearest runway.

The SDMP does not include housing or places of employment. Therefore, implementation of the SDMP would not result in any permanent or long-term exposure to excessive airport noise. City staff or contracted employees working at the maintenance sites would be exposed to airport noise. However, this exposure would be temporary and, as noted above, the maintenance sites are outside of all mapped noise contour boundaries for the airport. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial amounts of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*
- b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The SDMP does not include housing, places of employment, roads, or any other development that could impact population or induce growth, nor would implementation of the SDMP displace existing housing. The SDMP includes maintenance activities at stormwater drainage facilities that would not affect population or housing. There would be no impact.

NO IMPACT

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15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1 Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2 Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3 Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5 Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a.1. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*
- a.2. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*
- a.3. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*
- a.4. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

- a.5. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?*

As described above in Section 14, *Population and Housing*, the SDMP does not include development of structures or infrastructure that would impact the City's population. Therefore, service ratios for facilities and staff for public services would not be impacted. The maintenance activities included in the SDMP would not impact any public facilities or services other than by improving the efficiency of stormwater drainage throughout the City. Therefore, there would be no impact to public services.

NO IMPACT

16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*
- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The SDMP does not include development of housing or other structures that would lead to an increase in the population that uses local parks and recreational facilities. Some maintenance sites are in or near parks, including Site 1 at Oak Newton Park and Site 8 at Via Paraiso Park. However, maintenance activities at these sites would be limited to stormwater drainage facilities, and would not result in changes that would increase park use or degrade facilities. The project does not include new or expanded recreational facilities, or any activity that would result in the need for new or expanded facilities. There would be no impact.

NO IMPACT

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17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*
- b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

The SDMP would be subject to the requirements of the City of Monterey General Plan Circulation Element. The Circulation Element establishes level of service (LOS) D as an acceptable automobile LOS standard for roadway segments that are not within a multi-modal corridor, and LOS E or F as an acceptable automobile LOS on roadway segments within a completed multi-modal corridor as defined in the City's Multi-Modal Mobility Plan.

The SDMP does not include or require changes to roads, public transit service, or bicycle or pedestrian facilities. Implementation of the SDMP would not affect such facilities other than to reduce the likelihood of flooding on paved surfaces throughout the City.

The SDMP would require transportation of work crews and equipment to maintenance sites. Vehicles used for maintenance activities would include all-terrain vehicles and dump trucks. Heavy equipment such as a bulldozer may briefly require use of roads to access the maintenance sites. In some instances, shoulders, lanes, or entire roads may be temporarily closed, requiring detours. However, such disruptions would be limited to between one day and two weeks per site. Conservatively estimating 10 total trips per site, with annual maintenance occurring at 29 sites, the SDMP would result in 290 total vehicle trips per year, which would not substantially impact circulation in the study area or conflict with the City's LOS goals. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

The SDMP does not include changes to roads or require new access to roads. Maintenance activities included in the SDMP would occur at existing stormwater drainage facilities. No geometric design features or incompatible uses would be added to the maintenance sites. Therefore, there would be no impact.

NO IMPACT

- d. *Would the project result in inadequate emergency access?*

As described above, the SDMP would not substantially increase traffic in the study area. Disruptions to traffic caused by closures and detours would affect only very small road segments, in order to allow maintenance vehicles to access the maintenance sites. Road closures and detours would not be required at most sites, and would last for a maximum of two weeks when required. Impacts to emergency access would be less than significant.

NO IMPACT

18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

California Assembly Bill 52 of 2014 (AB 52) establishes that “A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is

traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

The City of Monterey prepared and mailed an AB 52 notification letter for the project to the tribe on the City’s contact list, the Ohlone/Costanoan-Esselen Nation (OCEN), on January 29, 2019 (Appendix G). Under AB 52, tribes are afforded 30 days to respond and request consultation, giving OCEN until February 27, 2019 to respond to the City’s letter. On February 26, 2019 the City of Monterey received a response to the AB52 letter from Louise Miranda Ramirez, Chairperson of the Ohlone/Costanoan-Esselen Nation requesting a tribal consultation.

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1?*

The general project vicinity is known to be sensitive for cultural resources of Native American origin. As discussed in the Section 5, *Cultural Resources*, ground disturbance proposed under the project will be minimal and targeted on recently accumulated sediments impeding the flow of the storm drainage system and is thus not likely to disturb any tribal cultural resources. If ground disturbance extends beyond accumulated sediments and into native soils, it is possible that the project could impact unknown archaeological sites that may also be considered tribal cultural resources. Mitigation Measures CR-1 and CR-2 require archaeological and Native American monitoring when ground disturbance extends beyond the removal of recently accumulated sediments, and outline steps to take in the event of unanticipated discoveries during construction, which would reduce impacts to archaeological resources that could also be considered tribal cultural resources. The following mitigation measure would further reduce impacts regarding disrupting archaeological tribal cultural resources to a less than significant level.

TCR-1 Unanticipated Discovery of Tribal Cultural Resources

In the event that archaeological resources of Native American origin are identified during maintenance activities, the City shall notify tribes on the City of Monterey AB 52 contact list. If the City, in consultation with local Native Americans, determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared by the archaeologist in coordination with the City and the appropriate Native American tribal representative(s) and implemented in accordance with state guidelines and in consultation with Native American groups. The plan shall include avoidance of the resource or, if avoidance of the resource is infeasible, the plan shall outline the appropriate treatment of the resource in coordination with the archeologist and the appropriate Native American tribal representative(s). Potential treatment measures could include, but are not limited to: heritage recovery, interpretive signage or other programs, and/or continued use and access provided to the tribe(s).

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

SDMP maintenance activities would occur at existing stormwater drainage facilities. The SDMP does not include construction of new facilities for stormwater drainage, or of any other utilities infrastructure. There would be no impact.

NO IMPACT

- b. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

The SDMP does not include new structures and would not require any connections to a potable water supply. The SDMP addresses the City's stormwater drainage system, which is distinct from the potable water supply and infrastructure. Implementation of the SDMP would not result in an increased demand for potable water supply. There would be no impact.

NO IMPACT

- c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

The SDMP maintenance sites are facilities in the City's stormwater drainage system, which is distinct from the sanitary sewer system. The stormwater drainage system does not transmit water to a wastewater treatment plant. Therefore, there would be no impact.

NO IMPACT

- d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The City of Monterey is a member of the Monterey Regional Waste Management District (MRWMD), which operates the Monterey Peninsula Landfill (MPL) and Materials Recovery Facility (MRF) in the City of Marina. The facility is permitted to receive a maximum of 3,500 tons of waste per day. The current daily intake is approximately 1,300 tons per day, with a per-person rate of six pounds daily (MRWMD 2016). The remaining daily intake capacity at the facility is 2,200 tons. MRWMD has improved its facilities to ensure that its member agencies achieve the state's goal, set forth by Assembly Bill 939, of 75 percent diversion of solid waste from landfill disposal (MRWMD 2016).

The SDMP does not include structures that would require routine waste management service. Maintenance activities would include removal of litter from maintenance sites. This litter would be sent to the MPL. However, the SDMP would not create new sources of solid waste, and removed litter would be fairly limited in volume. Removal of existing solid waste from the environment would not represent a substantial demand on MPL's available intake capacity. Therefore, this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. 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 or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

The City provides fire protection services to all areas within the City limits except for the Naval Postgraduate School facilities and housing areas. The City does not include state responsibility areas for fire protection. Most of the City is designated Local Responsibility Area: Non-Very High Fire Hazard Severity Zone (VHFHSZ), while portions of the western and southern parts of the City are designated Local Responsibility Area: VHFHSZ. Most of the land bounding the City to the west, south, and east is under state responsibility and is designated VHFHSZ (California Department of Forestry & Fire Protection [CAL FIRE] 2008). In the event of a wildfire that required evacuation, SR 1 Northbound, SR 1 Southbound, and SR 68 Eastbound are the evacuation routes identified by the City of Monterey General Plan (2016a).

The SDMP does not include new development or other substantial changes to any City landscape that would impact vulnerability to wildfire, impede emergency response access, or impede

evacuation routes. As discussed in Section 17, *Transportation*, implementation of the SDMP would not result in substantial traffic congestion that could impair emergency response or evacuation. Therefore, this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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 or that may result in temporary or ongoing impacts to the environment?*

Proposed maintenance activities would consist of removing flow impediments in the City's stormwater drainage facilities. Physical changes to the maintenance sites would be limited to those that improve function of and access to the facilities. While some vegetation clearing and re-planting would occur, substantial changes to the sites are not anticipated. Implementation of the SDMP would not include the installation of new drainage facilities, new infrastructure associated with fire prevention/response, or any other new infrastructure. Nor would the project increase population in the study area or increase human presence at the maintenance sites. Therefore, there would be no exacerbation of existing fire hazards, and no changes to human vulnerability to wildfire. There would be no impact.

NO IMPACT

- d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

As described above in Section 7, *Geology and Soils*, impacts related to landslides and soil instability would be less than significant. While some SDMP activities could cause minor slope destabilization by removing vegetation and sediment, the SDMP would minimize this effect through installation of erosion control devices. Further, by improving the efficiency of stormwater drainage facilities, implementation of the SDMP would positively impact post-fire flooding and landslide hazards because the flow of stormwater towards fallout locations would face fewer impediments. Therefore, this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

The SDMP involves maintenance at existing stormwater drainage facilities. No zoning or land use changes are required, and no new structures are proposed. Therefore, implementation of the SDMP does not have the potential to substantially reduce habitat or eliminate a plant or animal community. As discussed in Section 4, *Biological Resources*, impacts to special status wildlife species that may occur as a result of the SDMP are mitigable. Mitigation Measure BIO-1 requires pre-activity surveys for special status plant species, with subsequent avoidance measures based on survey

results. Mitigation Measure BIO-2 requires preparation of a restoration plan for replacement planting of any special status plant species that are removed during maintenance activities.

As discussed in Section 5, *Cultural Resources*, and Section 7, *Geology and Soils*, the SDMP includes minimal ground disturbance and would be unlikely to affect important examples of California history or prehistory. Where greater ground disturbance is required, Mitigation Measures CUL-1 and GEO-1 require monitoring to ensure that archaeological and paleontological resources can be properly evaluated and mitigated if encountered. Mitigation measures CUL-2 and GEO-2 require that work be halted if a resource of cultural or paleontological significance is unearthed. These measures would reduce impacts to cultural and paleontological resources to a less-than-significant level. Therefore, impacts to important examples of California history and prehistory would be less than significant with implementation of required mitigation measures.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

As described in the discussion of environmental checklist Sections 1 through 20, the project would result in no impact, a less than significant impact, or a less than significant impact with mitigation incorporated, with respect to all environmental issues. Cumulative impacts of several resource areas have been addressed in the individual resource sections above: Air Quality, Biological Resources, Greenhouse Gases, Noise, and Transportation. CalEEMod was utilized to assess the air quality and GHG impacts resulting from the project, concluding that the impacts associated with these two issues were less than significant. Analysis of biological resources determined that incremental impacts to species and habitat would be less than significant with mitigation measures incorporated, as described above. Noise analysis concluded that noise impacts would be less than significant with incorporation of Mitigation Measure N-1, which requires measures to reduce noise from machinery during maintenance activities. Therefore, cumulative impacts from noise would be less than significant. As discussed in Section 17, *Transportation*, implementation of the SDMP would add less than one trip per day to area roadways, which would not result in a cumulatively considerable traffic impact. Other resource areas (e.g. mineral resources) were determined to have no impact. Several resource issues (e.g. geology, hazards and hazardous materials) are by their nature project-specific and impacts at one location do not add impacts at other locations or create additive impacts. As such, cumulative impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise. As detailed in Section 1, *Air Quality*, and Section 12, *Noise*, implementation of the SDMP would not result, either directly or indirectly, substantial amounts of air pollution or noise. As discussed in Section 8, *Hazards and Hazardous Materials*, with the implementation of Mitigation Measure HAZ-1, maintenance activities involving disturbance of soil and groundwater at Site 20 would not result in health risks to workers performing maintenance activities. Compliance with applicable rules and regulations related to hazards and hazardous materials would reduce

potential impacts on human beings to a less than significant level. Impacts to human beings would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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