

MITIGATION MONITORING AND REPORTING PROGRAM FOR THE LAGUNA NIGUEL WETLANDS OPERATIONS AND MAINTENANCE PROJECT

PREPARED FOR:

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Mitigation Monitoring and Reporting Program

Introduction

The California Public Resources Code, Section 21081.6, requires that a lead or responsible agency adopt a mitigation monitoring and reporting program (MMRP) when approving or carrying out a project when a mitigated negative declaration identifies measures to reduce potential adverse environmental impacts to less-than-significant levels. As lead agency for the proposed project, the City of Laguna Niguel (City) is responsible for adoption and oversight of the MMRP.

An initial study/mitigated negative declaration (IS/MND) has been prepared for the project that addresses the potential environmental impacts, and, where appropriate, recommends measures to mitigate these impacts. As such, an MMRP is required to ensure that the adopted mitigation measures are implemented successfully. This document lists each mitigation measure, describes the methods for implementation and verification, and identifies the responsible party or parties.

Project Overview

The proposed project would involve implementation of the operation and maintenance (O&M) plan (O&M Plan) for the project, which proposes a systematic program for flood control maintenance in 13 wetland sites throughout the Aliso Creek Watershed in the City of Laguna Niguel, Orange County, California.

The proposed project includes the routine maintenance and habitat management activities to be performed at the 13 City-owned wetland sites in the Sulphur Creek watershed; in a portion of the Salt Creek Watershed, within Chapparosa Park; and within Crown Valley Regional Park. The O&M Plan was prepared as a guide for the City to manage and maintain the 13 wetland sites for long-term sustainability and public safety. It establishes routine maintenance activities that will be performed at the 13 wetland sites, compensatory mitigation requirements, and general reporting requirements.

In general, operations and maintenance activities will include vegetation maintenance, sediment maintenance, flowline maintenance, access path maintenance, nonnative vegetation removal, trash and debris maintenance, and rodent and pest control. Additional details regarding the project description are contained in Chapter 2, *Project Description and Environmental Setting*, of the IS/MND.

The City actions required to approve the proposed project include the following:

- Adopt the MND and mitigation monitoring and reporting program.

Other discretionary actions and permits associated with the proposed project include the following:

- USACE Clean Water Act Section 404 Permit
- RWQCB Clean Water Act Section 401 Water Quality Certification and Porter-Cologne Act Waste Discharge Requirements
- CDFW Section 1602 Streambed Alteration Agreement

- USFWS Biological Opinion (BO) pursuant to Section 7 of the Endangered Species Act

Monitoring and Reporting Procedures

The MMRP for the proposed project will be in place through all phases of the project, including design, construction, and operation. The City will be responsible for administering the MMRP and ensuring that all parties comply with its provisions. The City may delegate monitoring activities to staff, consultants, or contractors. The City will also ensure that monitoring is documented through periodic reports and that deficiencies are promptly corrected. The designated environmental monitor will track and document compliance with mitigation measures, note any problems that may result, and take appropriate action to rectify problems.

Mitigation Monitoring and Reporting Program Implementation

Table 1 lists each mitigation measure included in the IS/MND by resource area. Certain inspections and reports may require preparation by qualified individuals, and these are specified as needed. The timing and method of verification for each measure are also specified.

Project Contact Information

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Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure No.	Mitigation Measure	Timing of Implementation	Method of Implementation	Responsible Party/Verifying Party
BIOLOGICAL RESOURCES				
MM-BIO-1	<p>For impacts on special-status species and any corresponding USFWS-designated Critical Habitat and sensitive vegetation communities, mitigation will be provided by the following measures, in consultation with USFWS and CDFW:</p> <ul style="list-style-type: none"> The preservation in perpetuity of all natural habitat areas within 11 of the wetland sites (excludes Sites 3 and 4, as Site 4 is a new mitigation site for Crown Valley Park Wetland Creation Area J03P01 [401 Certification: R9-2015-0098; 1602 Permit: 1600-2015-0098]) and therefore is already protected and Site 3 is a series of wetland treatment ponds that will be entirely maintained). A permanent protection mechanism (e.g., restrictive covenant) will be placed upon the land and the City will manage the land in perpetuity or transfer the land to an approved land manager. The City or subsequent land manager will implement the O&M Plan, managing and monitoring the 13 sites described herein to preserve the habitat, functions, and values in accordance with the goals identified in the O&M Plan. The land manager will be responsible for receiving any necessary permits to conduct long-term O&M activities identified in the 	Prior to implementation of the project	Implementation of a permanent protection mechanism for 11 of the wetland sites in perpetuity as outlined in the measure	Public Works Department, USFWS, CDFW

Mitigation Measure No.	Mitigation Measure	Timing of Implementation	Method of Implementation	Responsible Party/Verifying Party
	plan. Activities to preserve the natural vegetation communities may include enhancement activities.			
MM-BIO-2	<p>Maintenance would not permanently remove habitat and would not change the designation of the area as a water of the U.S. or state. Mitigation for impacts on the functions and services performed by the aquatic water resources jurisdictional to USACE, CDFW, or RWQCB will be provided by the following measures, in consultation with USACE, CDFW, and/or RWQCB:</p> <ul style="list-style-type: none"> • The preservation in perpetuity of all natural habitat areas and streambeds within 11 of the wetland sites (excludes Sites 3 and 4, as Site 4 is a new mitigation site for Crown Valley Park Wetland Creation Area J03P01 [401 Certification: R9-2015-0098; 1602 Permit: 1600-2015-0098]) and therefore is already protected and Site 3 is a series of wetland treatment ponds that will be entirely maintained). A permanent protection mechanism (e.g., restrictive covenant) will be placed upon the land and the City will manage the land in perpetuity or transfer the land to an approved land manager. The City or subsequent land manager will implement the O&M Plan, managing and monitoring the wetland sites described herein to preserve the habitat, functions, and values in accordance with the goals identified 	<p>Prior to implementation of the project</p>	<p>Implementation of a permanent protection mechanism for 11 of the wetland sites in perpetuity as outlined in the measure</p> <p>Approval of a Habitat Mitigation and Monitoring Plan</p>	<p>Public Works Department, USACE, CDFW, RWQCB</p>

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	<p>above. Activities to preserve the natural vegetation communities may include enhancement activities.</p> <p>The rehabilitation and enhancement of up to 2.37 acres of wetland and riparian habitat within Salt Creek Corridor Habitat Restoration Area (Site 13). The City will prepare a Habitat Mitigation and Monitoring Plan to be submitted to USACE, CDFW, and RWQCB for final approval. The Habitat Mitigation and Monitoring Plan will include the location and type of mitigation proposed as well as outline the maintenance and monitoring program proposed for the 5-year maintenance and monitoring period. Maintenance areas would continue to provide most wetland functions at the current level; the maintenance work would restore the wetland sites' hydrology; habitat connectivity in the channel would be retained. Only a few functions, such as energy dissipation, nutrient cycling, particulate retention, and plant communities, would be slightly degraded; other functions, including surface water storage and organic carbon export, would be improved. Minimization of maintenance needs would preserve vegetation to the extent feasible, maintain habitat connectivity, and improve habitat quality for sensitive species. After maintenance is performed, natural</p>			

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CULTURAL RESOURCES				
MM-CUL-1	<p>substrate and tree canopy cover would remain, and shrubby and herbaceous vegetation would recover and return; this would result in successional growth, which is advantageous for many species, including LBV (for the case of Site 13).</p> <p>Provide a Native American monitor and an archaeological monitoring during ground-disturbing activities that occur 2 feet below surface level. To ensure impacts on potential archaeological resources are minimized during O&M activities, the City will retain a qualified archaeological monitor who meets the Secretary of the Interior's Professional Qualifications Standards, as promulgated in Code of Federal Regulations, Title 36, Section 61, and a Native American monitor to be present for the following activities:</p> <ul style="list-style-type: none"> • Grading or excavation that occurs deeper than 2 feet below surface level and has the potential to encounter previously undisturbed soil • Creation of any new access paths in previously undisturbed soils <p>Cultural resources or Native American monitoring will not be needed during:</p> <ul style="list-style-type: none"> • Removal of accumulated sediment in stone or concrete-lined channels or culverts • Tree or vegetation pruning • Existing access path maintenance 	During ground-disturbing activities that occur 2 feet below surface level	City will retain a qualified archaeological monitor who meets the Secretary of the Interior's Professional Qualifications Standards, as promulgated in Code of Federal Regulations, Title 36, Section 61, and a Native American monitor to be present for the construction activities outlined in the measure	Public Works Department, Qualified Archaeological Monitor, Native American Monitor

Mitigation Measure No.	Mitigation Measure	Timing of Implementation	Method of Implementation	Responsible Party/Verifying Party
	<ul style="list-style-type: none"> • Chemical spraying for nonnative vegetation removal • Trash and debris maintenance • Rodent or pest control • Areas that have been cleared by tribal and cultural monitors during prior years' monitoring <p>If a feature or artifact is identified, the monitors will halt activities in the vicinity of the find, notify the applicant and the City, and prepare a proposal for the treatment of the find(s). This treatment may range from additional study to avoidance, depending on the nature of the find(s). A comprehensive archaeological technical report documenting the results of the monitoring program will be prepared and will include an inventory of all recovered artifacts, features, and other archaeological resources. The archaeological monitor in consultation with the tribal monitor will have the discretion to increase or decrease the level of monitoring.</p>			
MM-CUL-2	<p>The City-retained archaeologist will provide to the City an annual memorandum summarizing any monitoring activities that occurred that year only in the event that O&M activities triggered the need for cultural resources monitoring. The memorandum will include any archaeological finds and a map showing which areas have been monitored.</p>	Annually, if cultural resources monitoring was required	Submittal of an annual memorandum and map summarizing any monitoring activities that occurred that year only in the event that O&M activities triggered the need for cultural resources monitoring	Public Works Department, Qualified Archaeological Monitor

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GEOLOGY/SOILS/SEISMICITY				
MM-GEO-1	<p>Orange County-certified professional paleontologist will be retained by the City to provide professional paleontological services, which will include survey, education of O&M workers, and as necessary, on-site O&M monitoring, appropriate recovery, and reporting.</p> <ul style="list-style-type: none"> • The paleontologist will review the San Diego Natural History Museum record search and the proposed project's activities and will identify areas of potential survey. • Based on professional experience and review of the paleontological record search, a paleontological survey may occur prior to the start of O&M activities if potential areas of sensitivity are identified. • Based on survey results and professional judgement, paleontological monitoring may be conducted until the paleontologist determines there is no more need for further monitoring for a specific area based on site findings. • If fossil remains are discovered during project-related activities, activities in the vicinity of the find will stop immediately until the paleontologist can assess the nature and importance of the find and recommend appropriate treatment. Treatment may include preparation 	Prior to and during O&M activities	An Orange County-certified professional paleontologist will be retained by the City to provide professional paleontological services, which will include survey, education of O&M workers, and as necessary, on-site O&M monitoring, appropriate recovery, and reporting as outlined in the measure	Public Works Department, Orange County-Certified Professional Paleontologist

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	<p>and recovery of fossil materials to be housed in an appropriate museum or university collection and may also include preparation of a report for publication. The work will be conducted in conformance with the Orange County paleontological sensitivity guidelines (Eisentraut and Cooper 2002) and meet the requirements for recovery, salvage, laboratory preparation, preparation to the point of taxonomic identification, transferal, and preparation and submittal.</p> <ul style="list-style-type: none"> • Fossils recovered will be prepared, identified, and catalogued before donation to the accredited repository designated by the City of Laguna Niguel. • The retained qualified paleontologist will prepare a final report to be filed with the City in the event that O&M activities trigger the need for paleontological monitoring. If applicable, the report will include a list of specimens recovered, documentation of each locality, interpretation of fossils recovered, and all specialists' reports as appendices. The report will be required despite the presence or absence of fossils. 			

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TRIBAL CULTURAL RESOURCES				
MM-TCR-1	<p>Provide a Native American monitor during ground-disturbing activities that occur 2 feet below surface level. To ensure impacts on potential tribal resources are minimized during O&M activities, the City will retain a Native American monitor to be present for the following activities:</p> <ul style="list-style-type: none"> • Grading or excavation that occurs deeper than 2 feet below surface level • Creation of any new access paths in previously undisturbed soils <p>Native American monitoring will not be needed during:</p> <ul style="list-style-type: none"> • Removal of accumulated sediment in stone or concrete lined channels or culverts • Tree or vegetation pruning • Existing access path maintenance • Chemical spraying for nonnative vegetation removal • Trash and debris maintenance • Rodent or pest control • Areas that have been cleared by tribal and cultural monitors during prior years' monitoring 	During ground-disturbing activities that occur 2 feet below surface level	The City will retain a Native American monitor to be present for grading or excavation that occurs deeper than 2 feet below surface level as well as the creation of any new access paths in previously undisturbed soils	Public Works Department, Native American Monitor
ENVIRONMENTAL COMMITMENTS				
EC-BIO-1	The City will submit a pre-maintenance notification to the resource agencies annually, detailing the current status of the wetland sites and the maintenance in accordance with this O&M Plan to be undertaken during the following	Annually (prior to the start of the maintenance year)	Submittal of a pre-maintenance notification to USACE, RWQCB, and CDFW	Public Works Department, USACE, RWQCB, CDFW

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	maintenance year. The notification will also include the anticipated schedule and dates for work at each wetland site proposed for maintenance, minimization measures to be implemented, and biological monitor information.			
EC-BIO-2	At the end of the maintenance year (i.e., June 30), a post-maintenance summary will be prepared and submitted to the agencies documenting the activities and actual acreage of impacts that occurred under this O&M Plan for the year. A post-maintenance letter report will be provided 60 days after the conclusion of the maintenance year by the biological monitor. The report will include dates of work, minimization measures implemented, incidental wildlife observations, any issues or concerns that need short- and/or long-term attention (e.g., weed control, sediment removal, vector control), any adaptive management or changes in the maintenance and monitoring program that appear warranted based on monitoring results to date, and before-and-after photographs. The report details and timing may be modified during the permitting process by the USACE, RWQCB, and/or CDFW.	After the conclusion of the maintenance year	Submittal of a post-maintenance summary to the USACE, RWQCB, and CDFW	Public Works Department, USACE, RWQCB, CDFW
EC-BIO-3	Access routes for maintenance activities associated with vegetation clearing, trimming, or sediment removal will be confined to existing footpaths and	Prior to O&M activities	All staging areas and footpaths and access paths will be clearly delineated in the final plans	Public Works Department

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	access paths identified on Figure 9 of the Biological Technical Report (Appendix B of the IS/MND) and will be confined to the minimal amount of area necessary for maintenance activities and safe, reliable work. Development of new footpaths and access paths will be limited to the maximum extent possible. All staging areas and footpaths and access paths will be clearly delineated in the final plans.			
EC-BIO-4	General tree pruning will be conducted not more often than once per year between November and December and with the intent of developing structurally sound trees with adequate vertical and horizontal clearance adjacent to public access ways. Access path maintenance will include pruning and trimming of adjacent and overhanging vegetation for a 6-foot vertical and 3-foot horizontal clearance, removal of any dead or damaged branches or limbs overhanging the access path, and path erosion repair.	Once per year, between November and December	Maintenance plans will include tree pruning specifications as outlined in the measure	Public Works Department
EC-BIO-5	A Worker Environmental Awareness Plan will be developed and implemented prior to the start of O&M activities	Prior to O&M activities	Approval of a Worker Environmental Awareness Plan	Public Works Department
EC-BIO-6	Environmental training will be led annually by the qualified biologist(s) and will cover the sensitive resources found on site, flagging/fencing of exclusion areas, permit requirements, and other environmental issues. All	Annually, prior to initiation of O&M activities	Environmental training led by the qualified biologist(s) will be provided to all personnel overseeing maintenance activities	Public Works Department/ Qualified Biologist(s)

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	personnel overseeing maintenance activities within the wetland and riparian habitat will receive instruction prior to initiation of maintenance activities, as to the sensitivity of the work environment and the limitation of activities outlined herein. The conditions of the regulatory permits and this supplemental information will be reviewed by all personnel overseeing in these maintenance activities at a minimum of once per year.			
EC-BIO-7	All personnel will be prohibited from bringing domestic pets and firearms to the site.	During O&M activities	Maintenance plans and specifications will note domestic pets and firearms are prohibited on the project sites	Public Works Department
EC-BIO-8	All maintenance activities associated with vegetation clearing, trimming, or sediment removal will not be conducted during heavy rains to prevent unnecessary erosion, runoff, and sedimentation, and these activities will not resume until conditions are suitable for the movement of equipment and materials.	During O&M activities	Maintenance plans and specifications will note activities associated with vegetation clearing, trimming, or sediment removal will not be conducted during heavy rains and will not resume until conditions are suitable for the movement of equipment and materials	Public Works Department
EC-BIO-9	Daytime vehicle speeds will be restricted to posted speed limits on existing paved roads and to 15 miles per hour on dirt access roads during the all phases of the project.	During O&M activities	Maintenance plans and specifications will note vehicle speed limits	Public Works Department
EC-BIO-10	Trash and debris removal in the wetland areas will be conducted quarterly. All trash and debris will be removed by hand or by handheld	Quarterly	Maintenance plans and specifications will note trash and debris removal in the	Public Works Department

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	mechanized equipment from the wetland sites and legally disposed of off site.		wetland areas will be conducted quarterly as outlined in the measure	
EC-BIO-11	Rodents and pests will be controlled as necessary to limit excessive damage to native areas or adjacent ornamental landscaping. For rodents: Only non-chemical practices will be used for rodent control which incorporate Integrated Pest Management protocols such habitat reduction, exclusion, food reduction, trapping, and similar type methods. For shot hole beetles: The City proactively removes any infected trees that have the potential to conflict with pedestrians and vehicles, as well as down limbs that are determined to be a problem with clogging streambeds. The goal is to reduce the risk of harm from falling trees and limbs, as well as reduce the spread of shot hole beetles. The City's website provides information to residents and contractors for the control of shot hole beetles. The website has a link to the University of California, Riverside's Eskalen Lab. City staff and contractors continually examine City-owned trees to assess their viability.	During O&M activities	Maintenance plans and specifications will note the examination of City-owned trees that cause a public safety concern or that block flow in the wetland sites.	Public Works Department
EC-BIO-12	Necessary vegetation clearing and trimming will occur primarily within the channel bottom and will be limited to access paths along bank slopes to prevent the potential for erosion problems or trails.	During O&M activities	Maintenance plans and specifications will note vegetation clearing and trimming will occur primarily within the channel bottom and will be limited to access paths along bank slopes	Public Works Department

Mitigation Measure No.	Mitigation Measure	Timing of Implementation	Method of Implementation	Responsible Party/Verifying Party
EC-BIO-13	All maintenance activities associated with vegetation clearing, trimming, or sediment removal will be conducted during the nonbreeding season (typically September 15 through February 15) for avian species protected under the Migratory Bird Treaty Act. If maintenance activities must occur during the breeding season, then compliance with EC-BIO-17 would be required.	Prior to O&M activities	Maintenance plans and specifications will note all maintenance activities associated with vegetation clearing, trimming, or sediment removal will be conducted during the nonbreeding season (typically September 15 through February 15). If maintenance activities must occur during the breeding season, then compliance with EC-BIO-17 would be required	Public Works Department
EC-BIO-14	When possible, the City will use hand tools for manual vegetation clearing and sediment removal and will only use heavy equipment when necessary.	During O&M activities	Maintenance plans and specifications will note use of hand tools for manual vegetation clearing and sediment removal and heavy equipment will only be used when necessary	Public Works Department
EC-BIO-15	Vegetation clearing will occur outside of the breeding seasons for habitat occupied by coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, yellow warbler, yellow-breasted chat, and other avian species (e.g., coastal California gnatcatcher, February 15 through August 15; least Bell's vireo, March 15 through September 15). If vegetation clearing must occur during the coastal California gnatcatcher, least Bell's vireo, or southwestern willow flycatcher breeding season, a focused pre-activity nest survey will be conducted in the work area and 300-foot buffer by the qualified biologist(s) during 3 separate visits (on separate days), with the final visit occurring not	Prior to O&M activities and if vegetation clearing must occur during the coastal California gnatcatcher, least Bell's vireo, or southwestern willow flycatcher breeding season	Maintenance plans and specifications will note vegetation clearing will occur outside of breeding seasons for habitats occupied by coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, yellow warbler, yellow-breasted chat, and other avian species. If vegetation clearing must occur during breeding season, a focused pre-activity nest survey will be conducted in the work area and 300-foot buffer during 3 separate visits (on separate days), with the final visit occurring not more than 3 days prior to the start of O&M activities in any given area of the project area. The qualified biologist(s) will coordinate and determine if O&M activities could	Public Works Department, USFWS, CDFW, Qualified Biologist(s)

Mitigation Measure No.	Mitigation Measure	Timing of Implementation	Method of Implementation	Responsible Party/Verifying Party
	<p>more than 3 days prior to the start of O&M activities in any given area of the project area. If no active nests are discovered, O&M activities may proceed. If active nests are observed that could be disturbed by O&M activities, these nests and a 300-foot buffer will be avoided until the young have fledged and/or the monitor determines that no impacts are anticipated on the nesting birds or their young. The qualified biologist(s) will be responsible for coordinating with the U.S. Fish and Wildlife Service (USFWS) and CDFW to determine if O&M activities could disturb an active nest and when nests are no longer active. If O&M activities cease for 5 or more consecutive days during the nesting season, additional nesting bird surveys will be required to ensure that new nesting locations have not been established.</p>		<p>disturb an active nest and when nests are no longer active.</p>	
EC-BIO-16	<p>Noise monitoring will be conducted if O&M activities are scheduled during the coastal California gnatcatcher or least Bell's vireo breeding season to determine if the O&M-related noise levels will exceed 60 A-weighted decibels (dBA) hourly equivalent sound level (Leq) within 300 feet of the noise source. If nesting coastal California gnatcatcher or least Bell's vireo are in the vicinity of the project area and O&M activities are occurring during the breeding season, temporary noise</p>	<p>Prior to O&M activities and if O&M activities are scheduled during the coastal California gnatcatcher or least Bell's vireo breeding season</p>	<p>Maintenance plans and specifications will note noise monitoring will be conducted if O&M activities are scheduled during the California gnatcatcher or least Bell's vireo breeding season. Temporary noise attenuation barriers will be built if nesting coastal California gnatcatcher or least Bell's vireo are in the vicinity of the project area and O&M activities are occurring during the breeding season and if noise levels exceed 60 dBA. The qualified biologist(s) will ensure that noise</p>	<p>Public Works Department, USFWS, CDFW, Qualified Biologist(s)</p>

Mitigation Measure No.	Mitigation Measure	Timing of Implementation	Method of Implementation	Responsible Party/Verifying Party
	attenuation barriers will be built to reduce O&M-related noise to below 60 dBA hourly Leq. The qualified biologist(s) will be responsible for ensuring that noise attenuation barriers are successful at reducing noise levels. Documentation of the noise monitoring results will be provided to USFWS and CDFW within 45 days of completing the final noise monitoring event.		attenuation barriers are successful at reducing noise levels. Noise monitoring results will be provided to USFWS and CDFW within 45 days of completing the final noise monitoring event.	
EC-BIO-17	Vegetation clearing will occur outside of the breeding season for other avian species protected under the Migratory Bird Treaty Act (e.g., February 15 through September 15). If vegetation clearing must occur during the general avian breeding season, a pre-activity nest survey will be conducted within the O&M activity area and 300-foot buffer by the qualified biologist(s) 3 days prior to the start of O&M activities in any given area of the project area. If no active nests are discovered, maintenance activities may proceed. If active nests are observed that could be disturbed by maintenance activities, these nests and an appropriately sized buffer (typically a 300-foot buffer) will be avoided until the young have fledged and/or the monitor determines that no impacts are anticipated on the nesting birds or their young. If O&M activities cease for 5 or more consecutive days during the nesting season, additional nesting bird surveys will be required to	Prior to O&M activities and if vegetation clearing must occur during the general avian breeding season	Maintenance plans and specifications will note vegetation clearing will be scheduled and conducted outside of the nesting bird season. If vegetation clearing must occur during this time, a pre-activity nest survey will be conducted within the O&M activity area and 300-foot buffer by the qualified biologist(s) 3 days prior to the start of O&M activities in any given area of the project area. If nesting birds are found on or adjacent to the site or work area, these nests and an appropriately sized buffer (typically a 300-foot buffer) will be avoided until the young have fledged and/or the monitor determines that no impacts are anticipated on the nesting birds or their young. Survey reports shall be submitted to and approved by the City if O&M activities cease for 5 or more consecutive days during the nesting season.	Public Works Department, Qualified Biologist(s)

Mitigation Measure No.	Mitigation Measure	Timing of Implementation	Method of Implementation	Responsible Party/Verifying Party
	ensure that new nesting locations have not been established.			
EC-BIO-18	The established channels within jurisdictional waters will be maintained (i.e., removal of vegetation, accumulated vegetative detritus, and sediment; tree/shrub trimming; trash and debris removal; and maintenance of access paths) on a biannual basis, typically in spring and fall.	Biannually (i.e., spring and fall)	Maintenance plans and specifications will note the established channels within jurisdictional waters will be maintained as outlined in the measure	Public Works Department
EC-BIO-19	Discharge of imported sediment into the wetland/riparian area will not be permitted under any circumstances.	During O&M activities	Maintenance plans and specifications will note discharge of imported sediment into the wetland/riparian area will not be permitted under any circumstances	Public Works Department
EC-BIO-20	All maintenance activities associated within in-water project activities (i.e. vegetation clearing or sediment removal) will be conducted outside of the steelhead juvenile migration window (March-May; or when habitat is inaccessible due to ephemeral flows or water temperatures exceed 25°C).	During O&M activities	Maintenance plans and specifications will note all maintenance activities associated within in-water project activities will be conducted outside of the steelhead juvenile migration window as outlined in the measure	Public Works Department