## Serra Drive Outfall Repair Project Mitigation Monitoring and Reporting Program

**April 2021** 

The California Environmental Quality Act (CEQA) and the CEQA Guidelines require Lead Agencies to adopt a program for monitoring the mitigation measures required to avoid the significant environmental impacts of a project. This Mitigation Monitoring and Reporting Program (MMRP) ensures that mitigation measures imposed by the City are completed at the appropriate time in the development process.

The mitigation measures identified in the Initial Study/Mitigated Negative Declaration for the Serra Drive Outfall Repair Project are listed in this MMRP along with the party responsible for monitoring implementation of the mitigation measure, the milestones for implementation and monitoring, and a signoff that the mitigation measure has been implemented.

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Mitigation Measure	Implementation Schedule	Monitoring Agency	Sign-Off
BIO-1a: Work Windows  To avoid impacts to aquatic habitat, ground-disturbing activities shall occur during the summer dry season when flows are low, or streams are dry. Work shall be restricted to the period of June 1 through October 31. If work is not completed by October 31, and significant precipitation is not forecast within 48 hours, work may extend beyond this date with USFWS, NMFS, and CDFW agreement. Initial ground-disturbing activities shall be avoided between November 1 and March 31, the time period when CRLF are most likely to be moving through upland areas. All concrete within the high flow line shall be poured before September 15 to ensure adequate curing time prior to precipitation events. Furthermore, no construction activities shall occur during rain events or within 24 hours following a rain event. To minimize the potential for impacts, daily work shall commence no less than 30 minutes after sunrise and shall cease no less than 30 minutes before sunset.	Ground-disturbing activities shall occur during the summer dry season when flows are low, or streams are dry.  No construction activities shall occur during rain events or within 24 hours following a rain event.  Daily work shall commence no less than 30 minutes after sunrise and shall cease no less than 30 minutes before sunset.	City of Pacifica	
BIO-1b: Access Areas The contractor shall demarcate access and work area limits with wooden lathe stakes and flagging prior to the start of construction. Demarcation of the work area shall be maintained by the contractor in good repair for the duration of proposed project activities. No areas beyond the identified work area limits shall be disturbed.	Prior to the start of construction	City of Pacifica	

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BIO-1c: Workers Environmental Awareness Program Prior to commencement of grading for the proposed project, environmental professionals shall conduct a worker environmental awareness program (WEAP) to educate all construction personnel of the area's environmental concerns and conditions, including special-status species, site contamination prevention, and other relevant environmental protection measures. The WEAP shall constitute the conveyance of environmental concerns and appropriate work practices, including spill prevention, emergency response measures, protection of special-status resources, and proper implementation of BMPs to all construction and maintenance personnel. Instruction shall consist of a presentation by the CDFW-approved qualified biologist that includes a discussion of the biology and general behavior of any sensitive species which may be in the area, how they may be encountered within the work area, and procedures to follow when they are encountered. All on-site personnel shall be trained under the WEAP prior to working on-site. Contractor shall be responsible for maintaining a log of the WEAP of on-site personnel. The log shall be submitted to the City upon City's request.	Prior to the commencement of ground-disturbing activities	City of Pacifica	
BIO-1d: Disposal of Trash  During all proposed project activities, all trash that may attract predators shall be properly contained and removed from the work site by the contractor daily. Following construction, all trash and construction debris shall be removed from work areas.	During and following construction	City of Pacifica	

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BIO-1e: Stormwater Discharges The contractor shall develop and implement erosion control BMPs prior to construction to minimize any wind or water- related erosion and include provisions in construction contracts for measures to protect sensitive areas and prevent and minimize stormwater and non-stormwater discharges. Erosion control structures shall not include monofilament mesh or be of types that may entrap and/or kill wildlife. The BMPs shall be consistent with the San Mateo Countywide Pollution Prevention Program.	Prior to and during construction	City of Pacifica	
BIO-1f: Preconstruction Surveys  No more than 24 hours prior to the date of initial ground disturbance, a USFWS-approved biologist shall conduct a pre-construction survey for CRLF within the proposed project site. The survey shall consist of walking the proposed project site to ascertain the possible presence of the species. The USFWS-approved biologist shall investigate all potential areas that could be used by the CRLF for feeding, breeding, sheltering, movement, and other essential behaviors; this includes an adequate examination of small mammal burrows. If any adults, subadults, juveniles, tadpoles, or eggs are found, and cannot be avoided by proposed project activities, the biologist shall contact the USFWS to determine if moving of the individuals is appropriate. If relocation is determined to be appropriate, the USFWS approved biologist shall relocate the individual to a suitable location. In making this determination, the USFWS will consider if an appropriate relocation site exists. If relocation is determined to not be appropriate, work in the proposed project site shall only	No more than 24 hours prior to the date of initial ground disturbance	City of Pacifica	

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continue in areas where no harm to CRLF could result from the proposed project activities.				
BIO-1g: Biological Monitor  USFWS-approved biologists shall evaluate habitat within the Project site to determine what areas have potential to support CRLF and will provide guidance to the contractor with respect to procedural methods for advancing the Project while also ensuring no take of CRLF occurs. For this Project, areas within 300 feet of aquatic habitat, except developed areas, are potentially suitable. Prior to working in these areas, the biologist shall survey the area for CRLF prior to vegetation removal or ground disturbance. Once cleared, work may commence under the supervision of the biologist. If an exclusion fence is used, work may occur within the exclusion fence after the biologist has determined that there is no potential for CRLF to be present in the excluded area (within the fence perimeter). If the fence perimeter is compromised overnight, no work shall occur without the presence of the biologist until the biologist has cleared the area and verified that the fence perimeter is no longer compromised. Vegetation removal and ground disturbing activities that occur in areas that are not excluded (via an exclusion fence) shall require a supervision by a biologist. A USFWS-approved biologist shall be on-site during all construction activities that may result in take of the CRLF (equipment operation, grading, installation or removal of structures, dewatering or any other activity that could result in crushing of a CRLF) in areas where the species has potential to occur (any areas within the proposed project site except developed areas) except in areas that are protected by an exclusion fence (if	Prior to vegetation removal or ground disturbance	City of Pacifica		

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applicable; see Mitigation Measure BIO-1K for information about exclusion fences). The biologist shall provide oversight and have the authority and responsibility to stop proposed project activities if impacts to CRLF are posed. If workers need to remove or disturb vegetation, the biologist(s) shall first inspect the vegetation for any individual CRLFs.			
BIO-1h: Covering of Trenches  During construction, contractor shall securely cover with boards or other material trenches or pits 1-foot deep or deeper that are going to be left unfilled for more than 48 hours to prevent individual CRLF from falling into them. If covering a trench is not possible, an escape ramp with a maximum 30-degree angle will be installed to allow CRLF to exit the trench.	During construction activities	City of Pacifica	
Bio-1i: Work Within Creek  During construction, the contractor shall not allow equipment tracks, treads and tires to enter the live stream; all work shall be performed from the top of bank. To the maximum extent feasible, workers shall avoid disturbing and removing vegetation in the work area.	During construction activities	City of Pacifica	
BIO-1j: Use of Screens on Pumps Pumping for temporary dewatering is not anticipated, but if needed, the contractor (under the oversight of the USFWS-approved biologist) shall completely screen intakes with wire mesh not larger than 1/8 inch to prevent CRLF and salmonids, if present, from entering the pump system. Water shall be released or pumped downstream at rate that will	During construction activities	City of Pacifica	

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maintain active downstream flows with minimal sediment loads during construction, as dictated by a NMFS-approved biologist. Upon completion of construction activities, any barriers to flow shall be removed (with the oversight of the USFWS and NMFS-approved biologist) in a manner that would allow flow to resume with the least disturbance to the substrate to minimize liberation of sediment.			
The contractor shall install an exclusion fence shall around work areas after vegetation removal is complete if a biological monitor will not be present during work in those areas. The USFWS-approved biologist shall oversee the installation of the fence, which shall be at least 30 inches high and be buried at least 4 inches deep. The USFWS-approved biologist shall perform a clearance survey within the excluded area prior to the commencement of additional proposed project activities and shall establish that the excluded area is clear of CRLF before the commencement of further proposed project activities that could harm CRLF. Once an area is excluded from areas potentially occupied by CRLF and the area has been surveyed by the USFWS-approved biologist, and if no CRLF have been found within the enclosed area, work may proceed within the excluded area without the oversight of the USFWS-approved biologist as long as the integrity of the fence is maintained. The fence shall be inspected at least once per week by the USFWS-approved biologist or by a qualified person. A qualified person is defined as a City or proposed project employee that is trained by the USFWS-approved biologist. If conditions prevent an exclusion fence	After vegetation removal is complete	City of Pacifica	

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from being able to be fully enclose the proposed project site for any reason (e.g., conditions such as the presence of open waters prevents installation of a fence around part of the work area), the proposed project site shall be surveyed by a USFWS-approved biologist before the commencement of work each day.			
Prior to the installation of water diversion structures (e.g., cofferdams), a NMFS-approved fisheries biologist shall capture and relocate salmonids and other native fish within the proposed project site. The biologist shall place exclusion nets to prevent fish from temporarily occupying waters that may be impacted by liberated sediment. The exclusion nets shall be of sufficient height to span the water column and small enough in size (1/8 inch or less) to exclude juvenile fish from areas that may be subject to disturbance during excavation. This would apply to placement of cofferdams for the creek bypass system. A NMFS-approved qualified fisheries biologist shall perform all seining, electrofishing, and fish relocation activities. The biologist shall note the number of salmonids observed in the affected area, the number of salmonids relocated, and the date and time of collection and relocation. This information shall be provided to NMFS and/or CDFW upon their request or in compliance with proposed project permits. The biologist shall adhere to the following requirements for capture and transport of salmonids: The qualified fisheries biologist shall determine the most efficient means for capturing fish. Complex stream habitat generally requires the use of electrofishing equipment, whereas in outlet pools, fish may be concentrated by pumping down the pool and then seining or dip netting fish.	Prior to the installation of water diversion structures during construction	City of Pacifica  NMFS and/or CDFW	

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Initial fish relocation efforts shall be conducted at least two days prior to the start of construction within the live stream, providing the fisheries biologist an opportunity to return to the work area to perform additional electrofishing passes immediately prior to construction if there is water in the isolated construction area. Relocation activities shall be conducted during morning periods and may be halted at the discretion of the fisheries biologist if water temperatures rise and continued relocation presents a health risk to fish. Prior to capturing fish, the most appropriate release location(s) shall be determined by the qualified fisheries biologist, based on the following guidelines: similar water temperature as capture location; ample habitat for captured fish; and low likelihood of fish reentering work site or becoming impinged on exclusion net or screen. Air and water temperatures shall be periodically measured, and captured fish monitored by the qualified fisheries biologist. Temperatures shall be measured at the head of riffle tail of pool interface. Activities shall cease if health of fish is compromised owing to high water temperatures, or if mortality exceeds three percent of captured salmonids. The qualified biologist shall temporarily hold fish and amphibians in cool, shaded, aerated water in a flowthrough live car or buckets with water aeration devices. The qualified biologist shall protect fish and amphibians from jostling and noise and shall not remove fish from this container until the time of release.				
BIO-3: Nesting Birds Proposed project activities shall be conducted during the dry season, which partially overlaps with nesting bird season (February 1 to September 15). A qualified biologist shall	Proposed project activities shall be conducted during the dry season,	City of Pacifica		

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conduct a pre-construction nesting bird survey no more than 7 days prior to vegetation removal or initial ground disturbance, whichever occurs first. The survey shall include the proposed project site and a 250 feet buffer around the proposed project site to identify the location and status of any nests that could potentially be affected either directly or indirectly by proposed project activities. If active nests of native nesting bird species are located during the nesting bird survey, the qualified biologist shall establish a work exclusion zone around each nest. Established exclusion zones shall remain in place until all young in the nest have fledged or the nest otherwise becomes inactive (e.g., due to predation). The qualified biologist shall determine appropriate exclusion zone sizes. The exclusion zone sizes will vary based on species, nest location, existing visual buffers, noise levels, and other factors. An exclusion zone radius may be as small as 50 feet for common, disturbance-adapted species, such as house finches, or as large as 1000 feet for large raptors. A qualified biologist can reduce exclusion zone size from established levels if nest monitoring findings indicate that proposed project activities do not adversely impact the nest (e.g., the birds do not respond to baseline and punctuated proposed project noise), and if a reduced exclusion zone would not adversely affect the nest. If the nest buffer to be reduced is a raptor, the qualified biologist shall consult with and get approval from the CDFW prior to reduction of the buffer.	which partially overlaps with nesting bird season (February 1 to September 15). Surveys shall be conducted no more than 7 days prior to vegetation removal or initial ground disturbance, whichever occurs first.			
BIO-4: Section 7 Consultation pursuant to the ESA Section 7 of the Federal Endangered Species Act (ESA) (Section 7) is an interagency consultation framework that allows the Corps to issue permits for proposed projects in	Prior to, during, and after construction	City of Pacifica		

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their jurisdiction that have constraints that are under the administration of other federal agencies. In this case, the Corps consulted with the U.S. Fish and Wildlife Service USFWS and NMFS and issued Biological Opinions (BOs) for the proposed project. The BOs determined the effects on Federal-listed species and proscribed additional measures to mitigate for any loss incurred through the conduct of the proposed project. The project will abide by the terms of the BOs and Incidental Take Permits.			
BIO-5: Lake or Streambed Alteration Agreement Prior to the start of construction within riparian areas, the City shall obtain CDFW's approval of the final Lake and Streambed Alteration Agreement (LSAA). The project shall abide by the terms of the LSAA and shall implement measures detailed in the LSAA that would include, but would not be limited to, protections for CRLF and other species, erosion and sediment control, and other administrative directions. The project shall implement the terms of the LSAA in compliance with the timing prescribed in the measures.	Prior to the start of construction and during construction within riparian areas	City of Pacifica	
BIO-6: Clean Water Act 404 Permit/401 Water Quality Certification The City shall obtain a Clean Water Act Section 404 permit and a Section 401 Water Quality Certification. All conditions listed in the permit and certification shall be adhered to during project activities.	Prior to, during, and after construction	City of Pacifica	
CUL-1: Accidental Discovery of Archaeological Resources If indigenous or historic-era archaeological resources are encountered during proposed project development or operation, all activity within 100 feet of the find shall cease	In the event of an accidental archaeological discovery during	City of Pacifica	

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and the find shall be flagged for avoidance. The City and a	project		
qualified archaeologist, defined as one meeting the U.S.	construction or		
Secretary of the Interior's Professional Qualifications	operation		
Standards for Archeology, shall be immediately informed of			
the discovery. The qualified archaeologist shall inspect the			
find within 24 hours of discovery and notify the City of their			
initial assessment. If the City determines, based on			
recommendations from the qualified archaeologist, that			
the resource may qualify as a historical resource or unique			
archaeological resource (as defined in CEQA Guidelines			
Section 15064.5), or a tribal cultural resource (as defined in			
PRC Section 21074), the resource shall be avoided if			
feasible. Avoidance means that no activities associated with			
the proposed project that may affect cultural resources shall			
occur within the boundaries of the resource or any defined			
buffer zones. If avoidance is not feasible, the City shall			
consult with appropriate Native American tribes (if the			
resource is indigenous), and other appropriate interested			
parties to determine treatment measures to avoid, minimize,			
or mitigate any potential impacts to the resource pursuant to			
PRC Section 21083.2, CEQA Guidelines Section 15126.4.			
This shall include documentation of the resource and may			
include data recovery or other measures. Treatment for most			
resources would consist of (but would not be limited to			
sample excavation, artifact collection, site documentation,			
and historical research, with the aim to target the recovery of			
important scientific data contained in the portion(s) of the			
significant resource. The resource and treatment method			
shall be documented in a professional-level technical report			
to be filed with the California Historical Resources Information			
System. Work in the area may commence upon completion of			

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approved treatment and under the direction of the qualified archaeologist.			
CUL-2: Accidental Discovery of Human Remains If human remains are uncovered during proposed project construction, all work shall immediately halt within 100 feet of the find and the San Mateo County Coroner shall be contacted to evaluate the remains and follow the procedures and protocols set forth in CEQA Guidelines Section 15064.5(e)(1). If the county coroner determines that the remains are Native American, the County shall contact the California Native American Heritage Commission, in accordance with California Health and Safety Code Section 7050.5(c) and PRC Section 5097.98. As required by PRC Section 5097.98, the City shall ensure that further development activity avoids damage or disturbance in the immediate vicinity of the Native American human remains, according to generally accepted cultural or archaeological standards or practices, until the City has conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.	In the event of an accidental discovery of human remains during project construction	City of Pacifica  San Mateo County Coroner  Native American Heritage Commission	
<ul> <li>HAZ-1: The contractor shall implement the following actions throughout the duration of construction to maintain adequate emergency access to the site and through the adjacent neighborhood:         <ul> <li>Traffic controls, flag persons, signage, and/or safety site controls shall be used at all times when work is being done in the City's right-of-way or equipment is obstructing the right-of-way;</li> </ul> </li> </ul>	During construction activities	City of Pacifica	

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<ul> <li>The contractor shall obtain all clearances and permits required by the City for work within its right-of-way prior to the start of construction;</li> <li>The contractor shall comply with truck routes specified in the grading application, if any;</li> <li>The City or a representative of the City shall prepare a parking plan. The contractor shall comply with the parking plan and shall not damage adjoining or nearby parking strips;</li> <li>If any other construction proposed projects are being implemented in the vicinity of the proposed project site, the contractor shall coordinate all parking, construction processes, and deliveries with other nearby construction sites; and</li> <li>The contractor shall notify the City Police Department and Fire Department Station No. 72 of construction at minimum 72 hours prior to its start.</li> </ul>				
<ul> <li>HAZ-2: During construction activities, the construction contractor shall implement the following BMPs to prevent fire hazards:</li> <li>Staging areas, welding areas, or areas slated for development using spark producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. To the extent feasible, the contractor shall keep these areas clear of combustible materials in order to maintain a firebreak.</li> <li>No smoking, open flames, or welding shall be allowed in refueling or service areas.</li> <li>Service trucks shall be provided with fire extinguishers. A minimum of two fire extinguishers shall be kept on site during proposed project construction.</li> </ul>	During construction activities	City of Pacifica		

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<ul> <li>Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order.</li> </ul>				
<ul> <li>NOISE-1: The Contractor shall implement the following noise BMPs throughout the duration of construction:</li> <li>Construction hours shall be clearly posted on a sign at the entrance to the construction site.</li> <li>Residences adjacent to the construction site shall be notified of construction in writing 72 hours prior to the start of construction and shall include City contact information for reporting concerns.</li> <li>All equipment used on-site shall be muffled and maintained in good working condition. All internal combustion engine-drive equipment shall be fitted with mufflers in good condition.</li> <li>Unnecessary idling of internal combustion engines shall be prohibited, and all equipment shall be turned off when not in use.</li> </ul>	During construction activities	City of Pacifica		