MITIGATION MONITORING AND REPORTING PROGRAM

Carmel Meadows Lift Station and Sewer Replacement Project



March 2022

PREFACE

Section 21081 of the California Environmental Quality Act (CEQA) requires a Lead Agency to adopt a Mitigation Monitoring and Reporting Program whenever it approves a project for which measures have been required to mitigate or avoid significant effects on the environment. The purpose of the monitoring and reporting program is to ensure compliance with the mitigation measures during project implementation.

The Initial Study for the *Carmel Meadows Lift Station and Sewer Replacement Project* (project) concluded that implementation of the project could result in significant effects on the environment and mitigation measures were incorporated into the project or are required as a condition of project approval. This Mitigation Monitoring and Reporting Program addresses those measures in terms of how and when mitigation measures will be implemented.

This document does *not* discuss those subjects for which the Initial Study concluded that the impacts from implementation of the project would be less than significant and for which no standard or mitigation measures would be required.

		MITIGATION MONITORING A				
Impact	Mitigation Measure	Action Required	Monitoring Timeframe	Monitoring Frequency	Oversight of Implementation / Responsible Agency	Compliance Verification (Initial, Date, and Comments)
California red- legged frog (CRLF)	Mitigation Measure BIO-1: Worker Awareness Training Contractors and employees working on the project will attend a Worker Environmental Awareness Training Program (WEAP) prior to beginning work at the site. The WEAP will consist of a brief presentation by a USFWS-approved biologist, which may be given either in-person or via an automated PowerPoint presentation. The program will include a description of visual identification of any special-status species and required habitat, an explanation of the status of these species and their protection, consequences of non-compliance, and a description of the project-specific measures being taken to reduce effects to these species. Documentation of the training (i.e., a sign-in sheet) will be retained at the site and will be submitted with applicable reports.	Retain a qualified biologist to conduct WEAP training for recognizing special status resources in the project area. Require the construction contractor to submit a form signed by construction employees certifying WEAP attendance and understanding.	Prior to construction	Once	Carmel Area Wastewater District (CAWD)	
	Mitigation Measure BIO-2: Preconstruction Surveys and Construction Monitoring Within 48 hours prior to any construction activities, a USFWS-approved biologist will conduct surveys for CRLF in and adjacent to the project site. In addition, a qualified biologist will be on-site during ground-disturbing activities, including fence installation and the operation of heavy equipment (e.g., during excavation and grading activities). The qualified biologist will be given authority to stop any work that may result in take of listed species. If at any time a CRLF is observed within the project site and relocation is necessary, the USFWS will be consulted, and the animal will be transported to a suitable relocation site within the Carmel River, outside of the project site and released.	Retain a qualified biologist will conduct surveys for CRLF in and adjacent to the project site. If at any time a CRLF is observed within the project site and relocation is necessary, the USFWS will be consulted, and the animal will be transported to a suitable relocation site within the Carmel River, outside of the project site and released.	Within 48 hours prior to any construction activities	Once	CAWD	
	Mitigation Measure BIO-3: Exclusion Fencing Exclusionary fencing will be installed between the existing pipeline and the Carmel River Lagoon to prevent CRLF from entering from any adjacent habitat. Fencing will consist of silt fence or suitable substitute (e.g., ERTEC 48-inch high-visibility orange silt fencing), which will be buried at least 6-	Install exclusionary fencing between the existing pipeline and the Carmel River Lagoon.	The measures shall be implemented by a qualified biologist on a weekly basis and/or by an on-site representative on a	Weekly and/or daily basis	CAWD	

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	inches below the surface (or otherwise sealed in a like manner) to prevent incursion under the fence and will stand at least 36 inches above-ground. The fence will also be made of an opaque material for visibility. Exit funnels will be installed to allow any animals that may be occupying the project site to escape. Exclusion fencing will be inspected and maintained throughout the project. Fencing will be removed only when all construction equipment is removed from the site.	Develop a comprehensive fencing plan.	daily basis during project construction.			
	The exclusion fence will be checked for breaches on a daily basis by the qualified biologist. However, if a qualified biologist is not required to be on-site for biological monitoring or other tasks, an on-site representative may be appointed to check the fence on a daily basis and conduct repairs. If an on-site representative is conducting inspections and repairs, a qualified biologist will verify the fence status on a weekly basis to assure repairs are occurring as needed. A comprehensive fencing plan will be submitted for District approval.					
	Mitigation Measure BIO-4: Covering Trenches To prevent inadvertent entrapment of wildlife, any excavated, steep-walled holes or trenches more than 12 inches deep will either be covered at the close of each working day, or have one or more escape ramps constructed of earth fill or wooden planks installed with slopes less than 4:1 (H:V). Before any such holes or trenches are filled, they will be inspected for wildlife by a qualified biologist.	Close steep-walled holes or trenches more than 12 inches deep at the close of each working day or install escape ramps.	During construction	Once at the end of each day	CAWD	
	Mitigation Measure BIO-5: Work Windows The project will not operate heavy equipment on-site from 30 minutes after sunrise to 30 minutes before sunset, thereby avoiding disturbances during the most active times for the subject species. The project may occur year-round.	No operation of heavy equipment will occur 30 minutes after sunrise to 30 minutes before sunset.	The measures shall be implemented by the contractor and employees working on the project 30 minutes after sunrise to 30 minutes before sunset during project construction.	Daily during construction	CAWD	
	Mitigation Measure BIO-6: Delineating Boundaries	Delineate project boundary with stakes, fencing, or flagging	During construction	Once	CAWD	

	MITIGATION MONITORING AND REPORTING PROGRAM CARMEL MEADOWS LIFT STATION AND SEWER REPLACEMENT PROJECT						
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	The boundary of the project site will be clearly delineated with highly-visible stakes, fencing, or flagging.						
	Mitigation Measure BIO-7: Disposal of Trash To eliminate attractants of predators, any food-related trash will be disposed of in closed containers and removed from the site regularly.	Dispose of food related-trash in closed container	The measures shall be implemented by the contractor on an ongoing basis during project construction.	Regularly, as needed	CAWD		
	Mitigation Measure BIO-8: No Mono-filament Netting Mono-filament netting or similar material will not be used on any erosion control devices specified in the SWPPP.	Do not use mono-filament netting or similar material on erosion control devices	The measures shall be implemented by the contractor during project construction.	As needed	CAWD		
	Mitigation Measure BIO-9: Vehicular Traffic All vehicle traffic will be restricted to established or defined temporary access roads.	Restrict vehicle traffic to define temporary roads	The measures shall be implemented by the contractor on an ongoing basis during project construction.	As needed	CAWD		
	Mitigation Measure BIO-10: Revegetation The project will revegetate temporary disturbance areas, as such, no permanent loss of CRLF upland refugia habitat is anticipated.	Revegetate temporary disturbance areas	The measures shall be implemented by the contractor on an ongoing basis after construction		CAWD		
Hoary Bat	Mitigation Measure BIO-11: Bat Roost Assessment To avoid impacts to roosting bats, tree trimming, if necessary, should occur between October 1 and March 31, outside of the maternity roosting season (when female bats may have dependent young). If tree trimming must occur between April 1 and September 30, a bat roost habitat assessment should be conducted by a qualified biologist. The bat roost habitat assessment would determine the likelihood of the project site supporting roosting bats at the time of tree trimming. If the assessment identifies suitable or potentially occupied roosts within the project site, a pre-construction bat survey should be performed no more than 14 days prior to	Remove trees and snags between October 1 and March 31	The measure shall be implemented by the contractor prior to construction.	A bat roost habitat assessment should be conducted by a qualified biologist if tree removal will occur between April 1 and September 30. If the assessment identifies suitable or potentially occupied roosts within the project site, a pre-	CAWD		

		MITIGATION MONITORING A CARMEL MEADOWS LIFT STATION A				
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	removal using site appropriate survey methods to determine if potential roost structures are occupied. If special-status bat species are detected during these surveys, tree trimming shall be postponed until the end of the maternity roosting season. Irrespective of time of year, all felled tree branches should remain on the ground for at least 24 hours prior to chipping, off-site removal, or other processing to allow any bats to escape.			construction bat survey should be performed no more than 14 days prior to removal using site appropriate survey methods to determine if potential roost structures are occupied.		
Nesting Birds	Mitigation Measure BIO-12: Common Nesting Birds Project activities, such as vegetation removal, grading, or initial ground-disturbance, will be conducted between September 1 and January 31 (outside of the February 1 to August 31 nesting season) to the greatest extent feasible. If project activities must be conducted during the nesting season, a pre-construction nesting bird survey will be conducted by a qualified biologist no more than 14 days prior to vegetation removal or initial ground disturbance. The survey will include the project site and surrounding vicinity to identify the location and status of any nests that could potentially be affected either directly or indirectly by project activities. If active nests of native nesting bird species are located during the nesting bird survey, a work exclusion zone will be established around each nest by the qualified biologist. Established exclusion zones will remain in place until all young in the nest have fledged or the nest otherwise becomes inactive (e.g., due to predation). Appropriate exclusion zone sizes will be determined by a qualified biologist and 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, or as large as 250 feet or more for raptors. Exclusion zone size will be	Vegetation removal, grading, or initial ground-disturbance activities will be conducted between September 1 and January 31. Qualified biologist will conduct pre-construction nesting bird survey if project activities were to occur during February 1 to August 31. Established work exclusion zone if active nests are found within project area during nesting bird survey.	The measure shall be implemented by the contractor during nesting bird season from February 1 through August 31 and non-nesting season from September 1 through January 31.	Conduct preconstruction nesting bird surveys within 14 days of ground disturbance during nesting season. Remove trees and shrubs during nonnesting season.	CAWD	

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	reduced from established levels by a qualified biologist if nest monitoring findings indicate that project activities do not adversely impact the nest, and if a reduced exclusion zone would not adversely affect the nest.						
Coastal Bramble Critical Habitat	Mitigation Measure BIO-13: Revegetation Plan The project will avoid impacts to coastal brambles, coast live oak woodland, and Monterey cypress stands to maximum extent feasible. To mitigate for impacts to coastal brambles that cannot be avoided, a Revegetation Plan will be drafted and submitted to CAWD for approval. All temporary impact areas within the project site will be mitigated via on-site revegetation at a minimum 1:1 ratio of impacted to restored habitat. Natural recruitment of native vegetation is expected to occur and will be augmented through seeding with a native seed mix. In addition, native California blackberry plugs will be installed throughout the areas of temporary impacts to coastal brambles to re-establish this sensitive natural community. Impacts to coastal brambles from project implementation would be less than significant after implementation of this mitigation measure.	Prepare and implement Revegetation Plan.	The measure shall be implemented by the contractor prior to construction and after construction.	Revegetation Plan to be drafted and submitted to CAWD for approval.	CAWD		
Protected Trees	Mitigation Measure BIO-14: Protected Trees The applicant shall install construction fencing at the dripline of all protected trees in the project area and all equipment will be maintained and stored in the designated staging area ensuring that the tree protection zone is established. Fence material shall be high visibility construction fencing. Trimming of trees to provide access for machines and equipment shall be done with a hand saw or electrical saw, and no major limbs measuring four (4) inches in diameter 0.5 foot from the branch union shall be removed. If any root trimming is required, it should be	Install construction fencing and establish tree protection zone. Use hand tools to trim trees.	The measure shall be implemented by the contractor prior to construction.		CAWD		

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	done at 90 degrees to the grade, at the node, and only up to two (2) inches in diameter. No stockpiling of excavated soil during trenching shall be placed within the dripline of any protected tree.					
Archaeology	Mitigation Measure CULT-1: On-Site Archaeological Monitor To reduce potential impacts to cultural resources that may be discovered during development of the site, a qualified archaeological monitor (i.e., an archaeologist registered with the Register of Professional Archaeologists [RPA] or a Registered Archaeologist [RA] under the supervision of an RPA) shall be present and observe all soil disturbance for all grading and excavation activities. If at any time potentially significant archaeological resources or intact features are discovered, the monitor shall temporarily halt work until the find can be evaluated by the archaeological monitor. If the find is determined to be significant, work shall remain halted until a plan of action has been formulated, with the concurrence of CAWD, and implemented. To facilitate data recovery of smaller midden components, such as beads or lithic debitage, the excavated soil from the project site shall be screened during monitoring.	A qualified archaeological monitor will conduct monitoring during all soil disturbance activities.	The measure shall be implemented by the contractor during all project construction grading and excavation activities.	Stop work and notify a qualified archaeologist and CAWD.	CAWD	
	Mitigation Measure CULT-2: Unanticipated Discovery Protocol for 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 and the find shall be flagged for avoidance. CAWD and a qualified archaeologist, defined as one meeting the U.S. Secretary of the Interior's Professional Qualifications	Implement protocol when archaeological resources are discovered during construction.	The measure shall be implemented by the contractor during all project construction grading and excavation activities.	Halt work within a 100-foot radius of a discovered archaeological resource and notify a qualified archaeologist and CAWD.	CAWD	

¹ ANSI A300 Pruning Standard - Part 1. 2017. American National Standard for Tree Care Operations - Tree, Shrub, and Other Woody Plant Management – Standard Practices (Pruning). 33 pp.

	CAF	RMEL MEADOWS LIFT STATIO	ON AND SEWER REPLACEMENT	PROJECT		
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	Standards for Archaeology, shall be immediately informed					
	of the discovery. The qualified archaeologist shall inspect					
	the find within 24 hours of discovery and notify CAWD of					
	their initial assessment. If the resource is indigenous,					
	CAWD shall also contact relevant California Native					
	American Tribes to assist in determining if the resource					
	may qualify as a tribal cultural resource.					
	Based on recommendations from the qualified					
	archaeologist, if CAWD determines that the resource is					
	indigenous, relevant to California Native American Tribes,					
	and has potential to qualify as a historical resource, a					
	unique archaeological resource (as defined in CEQA					
	Guidelines § 15064.5), or a tribal cultural resource (as					
	defined in PRC § 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,					
	CAWD 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 § 21083.2 and CEQA Guidelines §					
	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 CHRIS.					
	Work in the area may commence upon completion of					

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	approved treatment and under the direction of the qualified archaeologist.					
Human Remains	Mitigation Measure CULT-3: Unanticipated Discovery Protocol for Human Remains If human remains are uncovered during proposed project construction, all work shall immediately halt within 100 feet of the find and the Monterey County Coroner shall be contacted to evaluate the remains and follow the procedures and protocols set forth in CEQA Guidelines § 15064.5(e)(1). If the County Coroner determines that the remains are Native American, CAWD shall contact the California Native American Heritage Commission (NAHC), in accordance with HSC § 7050.5(c) and PRC § 5097.98. As required by PRC § 5097.98, CAWD 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	Implement protocol is human remains are discovered during construction.	The measure shall be implemented by the contractor during all project construction grading and excavation activities.	Halt work within a 50- foot radius of discovered human remains and notify the Monterey County Coroner.	CAWD	
	standards or practices, until CAWD has conferred with the Most Likely Descendants regarding their recommendations.					
Paleontological Resources	Mitigation Measure GEO-1: Paleontological Resources The applicant shall inform its contractor(s) of the sensitivity of the project site for paleontological resources and shall include the following directive in the appropriate contract documents. The County shall verify that the following directive is included in the appropriate contract documents: "The subsurface of the construction site may be sensitive for paleontological resources. The contractor shall provide information to construction crews on how to recognize paleontological resources. If paleontological resources are encountered during project subsurface construction, all ground disturbing activities within 25 feet of the find shall be redirected and the County and a qualified paleontologist	Include directive in the appropriate contract documents. The County and a qualified paleontologist provide recommendations for treatment of discovery of paleontological resources.	The measure shall be implemented by the contractor during all project construction grading and excavation activities.	All ground disturbing activities within 25 feet of the find shall be redirected and the County and a qualified paleontologist contacted to assess the situation.	CAWD	

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	contacted to assess the situation. Project personnel shall not collect or move any paleontological materials. Paleontological resources include fossil plants and animals, and such trace fossil evidence of past life as animal tracks." The County and a qualified paleontologist shall make recommendations for the treatment of the discovery. If found to be significant, and project activities cannot avoid the paleontological resources, adverse effects to paleontological resources shall be mitigated. Mitigation may include monitoring, recording the fossil locality, data recovery and analysis, preparation of a technical report, and providing the fossil material and technical report to a paleontological repository, such as the University of California Museum of Paleontology. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the County for review.						
Noise	 Mitigation Measure NOISE-1: Construction Noise CAWD shall incorporate the following practices into the construction documents to be implemented by the project contractor: Construction hours shall be limited to 8:00 A.M. to 5:00 P.M. Monday through Friday. Notify businesses, residences, and noise-sensitive land uses adjacent to construction sites of the construction schedule in writing. Designate the County's construction manager as responsible for responding to any local complaints about construction noise. The construction manager shall determine the cause of the noise complaints (for example starting too early, or a bad muffler) and institute reasonable measures to correct the 	Implement construction noise reduction practices.	The measure shall be implemented by the contractor prior to construction and during construction.	Include noise control best management practices into construction documents prior to construction. Implement noise control best management practices during construction.	CAWD		

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Tribal Cultural	problem. Conspicuously post a telephone number for the construction manager at the construction site. • Maximize the physical separation between noise generators and noise receptors. Such separation includes, but is not limited to, the following measures: • Use heavy-duty mufflers for stationary equipment and barriers around particularly noisy areas of the site or around the entire site; • Where feasible, use shields, impervious fences, or other physical sound barriers to inhibit transmission of noise to sensitive receptors; • Locate stationary equipment to minimize noise impacts on the community; and • Minimize backing movements of equipment. • Use quiet construction equipment whenever possible. • Prohibit unnecessary idling of internal combustion engines.	Tribal Monitor conducts	The measure shall be	A Tribal Monitor	CAWD	
Resources	Mitigation Measure TCR-1: Tribal Cultural Resources To ensure that Tribal Cultural Resources incur less than significant impacts, a Tribal Monitor approved by the appropriate tribe traditionally and culturally affiliated with the vicinity of the subject parcel and that has consulted with the County and designated one lead contact person in accordance with AB 52 requirements, or other appropriately NAHC-recognized representative, shall be on-site and observe all project-related grading and excavation to identify findings with tribal cultural significance. This Tribal Monitor shall have the authority to temporarily halt work in order to examine any	monitoring during ground disturbance activities.	implemented by the contractor on an ongoing basis during project construction grading and excavation activities.	approved by the appropriate tribe traditionally and culturally affiliated with the vicinity of the subject parcel	CAWD	

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	potentially significant cultural materials or features. If resources are discovered, the owner/applicant/contractor shall refer to and comply with Mitigation Measure CULT-1 as applicable. This mitigation is not intended to alleviate responsibility of the owner or its agents from contacting the County Coroner and complying with State law if human remains are discovered.							