MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared pursuant to CEQA Guidelines (California Code of Regulations, Title 14), which state the following:

In order to ensure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.

The public agency may choose whether its program will monitor mitigation, report on mitigation, or both. "Reporting" generally consists of a written compliance review that is presented to the decision making body or authorized staff person. A report may be required at various stages during project implementation or upon completion of the mitigation measure. "Monitoring" is generally an ongoing or periodic process of project oversight. There is often no clear distinction between monitoring and reporting and the program best suited to ensuring compliance in any given instance will usually involve elements of both.

Table 1 lists the potentially significant impacts and proposed mitigation measures identified in the Final Initial Study/Mitigated Negative Declaration (IS/MND). Table 1 describes the timing of implementation of the mitigation measures (i.e., when the measure will implemented) and the Coastside County Water District (District) staff or individual responsible for ensuring implementation of the measures. Finally, Table 1 describes the District staff or individual responsibility for monitoring the mitigation measures.

1

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Table 1Mitigation Monitoring and Reporting Program

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
BIOLOGICAL RESOURCES				
Impact BIO-a: Special Status Species Special-status plant species would not be affected by project construction activities. The project area does not support suitable habitat for all but three special- status plant species known to occur in the vicinity of the project area. Suitable habitat for the three special-status plant species with potential to occur in the project area (Choris' popcorn flower, Hickman's cinquefoil, and saline clover) is limited to low-lying mesic areas on the fringe of the freshwater stream and surrounding areas. Implementation of Mitigation Measure BIO-1 will limit all construction activities to designated areas at minimum 15 feet from the top of the creek bank, and thus outside of suitable habitat for these three species. Impacts to special- status plant species would be <i>less than significant</i> . Common and special-status wildlife, particularly birds and bats, may be exposed to noise and other disturbance during construction, but these activities are typical of urban environments and these species	 Mitigation Measure BIO-1: All vegetation removal, ground disturbance, and other construction activities shall occur at minimum 15 feet above the top of the creek bank so as to avoid low-lying mesic areas on the fringe of the creek that may provide suitable habitat for the three special-status plant species with potential to occur in the project area. If vegetation removal and ground disturbance activities cannot be restricted to 15 feet above the top of the creek bank, then protocol rare plant surveys shall occur for these three species between the months of April and June. A qualified biologist, utilizing approved survey methodology by the CDFW and USFW, shall conduct these surveys. Mitigation Measure BIO-2: To the extent feasible and necessary, tree removal or tree trimming shall be restricted to the period between September and May, outside of the maternity roosting season for bats. If trees are slated for removal or trimming during the maternity roosting season for bats (May – August), a qualified biologist shall conduct a bat survey prior to the installation of work. If a bat roost is observed, a 50-foot buffer around the roost should be demarcated and observed. Mitigation Measure BIO-3: If ground disturbance or removal of vegetation occurs between February 1 and June 30, preconstruction bird surveys shall be performed by a qualified biologist to determine the presence and location of nesting bird species. If ground disturbance or removal of surveys and bird species. If ground disturbance or removal of surveys shall be performed by a qualified biologist to determine the presence and location of nesting bird species. If ground disturbance or removal of vegetation occurs between July 1 and August 31, preconstruction bird surveys shall be performed within 30 days prior to such 	Implementation Responsibility: Project Manager from District or District Staff Biologist or Consulting Biologist Monitoring Frequency: Prior and during ground disturbance	Monitoring Responsibility: Construction Inspector; District	Initials

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
are usually acclimated to these types of disturbance. In addition to regulations for special-status species, most birds in the United States, including non-special-status species, are protected by the MBTA and the CFGC. Under this legislation, destroying active nests, eggs, and young is illegal. The primary potential for impacts to	activities. If active nests are present, establishment of temporary protective breeding season buffers will avoid direct mortality of these birds, nests, or young. The appropriate buffer distance is dependent on the species, surrounding vegetation, and topography and shall be determined by a qualified biologist as appropriate to prevent nest abandonment and direct mortality during construction. Ground disturbance and removal of vegetation within the project area does not require preconstruction bird surveys if performed between September 1 and January 31.			
birds (both special-status and non-) would be direct disturbances (including physical impacts) to active bird nests during the breeding bird season (defined generally as February 1 to August 31). Such disturbances could result in the abandonment of the nest and/or the destruction or injury of eggs and/or young. Tree trimming or tree removal has potential to impact roosts of bat species designated as "High Priority" by the WBWG. However, implementation of Mitigation Measure BIO-2 and Mitigation Measure BIO-3 would reduce such impacts to bats and birds to a <i>less-than-significant</i> level.	 The following measure bio-4. The following measures shall be implemented to avoid impacts to CRLF, PPT, SFGS, and steelhead: A qualified biologist shall be on-site during drilling activities to monitor the project's compliance with avoidance and minimization measures and to advise required measures should a listed species be present. A spill response plan shall be prepared for use in the unlikely event of a frac-out during HDD activities. Prior to the start of groundbreaking activities, all construction personnel shall receive training on special-status species and their habitats by a qualified biologist. The importance of these species and their habitat shall be described to all employees as well as the minimization and avoidance measures that are to be implemented as part of the project. The original list of employees who attend the training sessions will be maintained by the contractor and be made available for review by the USFWS and the CDFW upon request. 			
It is not anticipated that HDD activities will affect CRLF, SFGS, PPT, or steelhead. However, HDD does have the potential for "frac- out", where pressure built up in the bore tunnel can force drilling mud up through the ground and into the	 No trash shall be deposited on the site during construction activities. All trash shall be placed in trash receptacles with secure lids stored in vehicles and removed nightly from the project area. Any fueling and maintenance of equipment shall be conducted off-site, if practicable, and at least 50 feet from any designated 			

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natural environment. Although it is unlikely, if frac-out occurs, it may affect habitat and potentially individuals of these species. California red-legged frog, PPT and SFGS are likely to inhabit aquatic habitat and the banks of Pilarcitos Creek within the project area, and steelhead habitat includes aquatic features and the cover provided by riparian trees, in-channel root wads and debris, and emergent vegetation. These species may forage and disperse through the project area; CRLF may also breed in and adjacent to the project area. Implementation of Mitigation Measure BIO-4 would reduce such impacts to a <i>less-than-significant</i> level.	ESHA.			
Implementation of Mitigation Measure BIO-1 would reduce potentially significant impacts to a <i>less-than-significant</i> level. <i>Significance of Impact Before</i> <i>Mitigation:</i>				
Potentially Significant Significance of Impact After Mitigation: Less than Significant				

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
Impact BIO-b: Riparian Habitat Impacts to stream and riparian habitat in the project area will be avoided by HDD the portion of the pipeline that crosses Pilarcitos Creek below the creek bed. As previously stated, HDD does have the potential for "frac- out", where pressure built up in the bore tunnel can force drilling mud up through the ground and into the natural environment. Although it is unlikely, if frac-out occurs, it may affect sensitive stream and riparian habitat. There is also potential for soil disturbance or accidental release of materials that would impact stream and riparian habitats. Implementation of Mitigation Measure BIO-5 would reduce such impacts to a less- than-significant level. Project activities will occur at minimum 15 feet from the TOB, and outside of riparian habitat.	 Mitigation Measure BIO-5: The following general avoidance measures shall be implemented in the vicinity of stream and riparian habitat: Temporary silt fencing shall be installed along the entire perimeter of land disturbing activities in the vicinity of stream and riparian habitats. To the extent feasible, soil disturbance in the riparian corridor, including a 50-foot buffer zone around the riparian corridor shall be minimized. This will reduce the impact to existing soils and vegetation that will remain as natural habitat and reduce the potential for soil erosion. Perimeter erosion and sediment control measures (i.e., silt fencing, straw waddles) shall be installed within the buffer zone areas as an extra precaution to reduce the possibility of sediments entering the adjacent sensitive habitats. To the extent feasible, solid materials, including wood, masonry/rock, glass, paper, or other materials shall not be stored within 50 feet of riparian areas. Solid waste materials shall be properly disposed of off-site. Fluid materials used during construction should not be disposed of on-site and should be stored or confined as necessary to prevent spillage into natural habitats. If a spill of such material occurs, the area shall be cleaned and contaminated materials disposed of properly. The affected area shall be restored to its natural condition. 	Responsibility		
Although no vegetation trimming or removal is anticipated in riparian areas, there is potential for some unanticipated trimming or removal of riparian vegetation. Implementation of Mitigation Measure BIO-6 would	All vegetation removal, ground disturbance, and other construction activities shall occur at minimum 15 feet above the TOB and completely avoid impacts to riparian vegetation. If some vegetation removal and/or trimming in riparian areas is determined to be necessary, the following standards shall be implemented:			

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
reduce such impacts to a less- than-significant level.	 Impacted riparian vegetation shall be replaced at a minimum ratio of 3:1, utilizing a vegetation replanting plan prepared by a District-approved qualified biologist; Minimize trimming or removal of riparian vegetation; 			
Significance of Impact Before Mitigation: Potentially Significant	 Minimize land exposure during construction and use temporary vegetation or mulching to protect critical areas; Minimize erosion, sedimentation and runoff by appropriately grading and replanting modified riparian areas; 			
Significance of Impact After Mitigation: Less than Significant	 Use only adapted native or non-invasive exotic plant species when replanting riparian areas; and Maintain natural vegetation buffer areas that protect riparian habitats. 			
CULTURAL RESOURCES				
Impact CULT-b,d: Accidental	Mitigation Measure CULT-1:	Implementation	Monitoring	
Discovery The project site does not contain any known archaeological resources and has a low potential to contain buried cultural deposits	The District or its contractor shall conduct pre-work training so that in the event that soil disturbance uncovers buried archaeological deposits, workers are aware of what a buried deposit might look like and what they need to do.	Responsibility: Project Manager from District Monitoring	Responsibility: Construction Inspector; District	Initials Date
or human remains based on past disturbances. However, the project could uncover such materials during construction.	The contractor shall comply with California Health and Safety Code Section 7050.5 and California Public Resources Code Sections 5097.5, 5097.9 et seq., regarding the discovery and disturbance of cultural materials or human remains, should any be discovered during project construction.	Frequency: During ground disturbance		
Potential impacts on unknown buried cultural resources or human remains would be <i>less than</i> <i>significant</i> with compliance with Mitigation Measure CULT-1.	In keeping with the CEQA guidelines, if archaeological remains are uncovered, work at the place of discovery shall be halted immediately until a qualified archaeologist can evaluate the finds (§15064.5 [f]). Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools; grinding and			
Significance of Impact Before Mitigation: Potentially Significant	mashing implements (e.g., slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils. Midden soils may contain a combination of any of the previously listed items with the possible			

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Significance of Impact After Mitigation: Less than Significant	addition of bone and shell remains, and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).			
	The following actions are promulgated in Public Resources Code 5097.98 and Health and Human Safety Code 7050.5, and pertain to the discovery of human remains. If human remains are encountered, excavation or disturbance of the location shall be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner shall contact the Native American Heritage Commission. The Native American Heritage Commission shall identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.			
Impact CULT-c: Paleontological Resources Most of the project site follows existing road rights-of-ways in a developed portion of the City and does not contain any undisturbed land. The City of Half Moon Bay Local Coastal Program/Land Use Plan (LCP/LUP), Chapter 6 Archaeological and Paleontological Resources states that "No Paleontological resources of known significance have been identified in Half Moon Bay; they are extremely limited throughout the entire San Mateo County Coastal Zone."	<i>Mitigation Measure CULT-2:</i> The District or its contractor shall conduct pre-work training so that in the event that soil disturbance uncovers buried paleontological deposits, workers are aware of what a buried deposit might look like and what they need to do. If buried paleontological resources are discovered during earthmoving activities, work shall stop in that area and within 100 feet of the find until a qualified paleontologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the City of Half Moon Bay and other appropriate agencies.	Implementation Responsibility: Project Manager from District Monitoring Frequency: During ground disturbance	<i>Monitoring</i> <i>Responsibility:</i> Construction Inspector; District	Initials

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
Significance of Impact Before				
Mitigation:				
Potentially Significant				
Significance of Impact After				
Mitigation:				
Less than Significant				
HAZARDS AND HAZARDOUS MATE	RIALS			•
Impact HAZ-g:	See Traffic-1.	Implementation	Monitoring	
Emergency Response		Responsibility:	Responsibility:	Initials
Construction activities would		Project Manager	Construction	
require temporary lane closures		from District	Inspector;	
and detours around the work area.			District	
Emergency access to or evacuation				Date
from surrounding areas would not		Monitoring		
be restricted during construction		Frequency:		
because of the availability of		During		
detours, but minor delays may be		construction		
experienced for access to or				
evacuation from the land uses				
adjacent to the work area. The				
trenches used to install pipe could				
be quickly covered in the event of				
an emergency to allow vehicles to drive through the work area, which				
would ensure the project does not				
prevent emergency access to the				
residences or conflict with an				
emergency response or evacuation				
plan. Detours will be readily				
available at all times to allow				
emergency vehicles access around				
the work area. With				
implementation of Mitigation				
Measure TRAFFIC-1 and traffic				
control measures included in the				
project description, impacts would				

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
Environmental Impact be less than significant. Significance of Impact Before Mitigation: Potentially Significant Significance of Impact After Mitigation: Less than Significant NOISE Impact NOISE- a, c, d: Construction Noise The temporary noise from construction would not cause a substantial increase in ambient noise or expose sensitive receptors to unacceptable noise levels for long periods of time. Impacts associated with construction noise would cause a significant, temporary increase in noise levels. Incorporation of Mitigation Measure NOISE-1 would reduce potentially significant noise impacts to a less- than-significant level. Long-term operational noise impacts would be less than significant because the conditions would be similar to existing noise levels. The new pipeline would be underground and would not result in a long-term noise increase	 Mitigation Measure NOISE-1: The District shall incorporate the following practices, in addition to those listed in the project description, into the construction documents to be implemented by the project contractor: Construction hours shall be limited to 8 a.m. to 6 p.m. Monday through Friday; 8 a.m. to 6 p.m. Saturdays; and 10 a.m. to 6 p.m. Sundays and holidays unless otherwise approved in writing by the Director of Public Works. Notify businesses, residences, and noise-sensitive land uses adjacent to construction sites of the construction schedule in writing. Designate the District'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 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 			
Significance of Impact Before Mitigation: Potentially Significant	 the entire site; Use shields, impervious fences, or other physical sound barriers to inhibit transmission of noise to sensitive 			

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
Significance of Impact After <i>Mitigation:</i> Less than Significant	 receptors; Locate stationary equipment to minimize noise impacts on the community; and Minimize backing movements of equipment. Use quiet construction equipment whenever possible. Impact equipment (e.g., jack hammers and pavement breakers) should be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically-powered tools. Compressed air exhaust silencers should be used on other equipment. Other quieter procedures, such as drilling rather than using impact equipment, should be used whenever feasible. Prohibit unnecessary idling of internal combustion engines. 			
PUBLIC SERVICES				
Impact Public Services -a: Emergency Response Given the proposed project would not permanently increase the existing residential or employment population in the City, the project would not result in a long-term increase in the demand for public services or require construction of new governmental facilities. The purpose of the project is to improve water system infrastructure. Therefore, no impacts related to schools, parks or other public facilities would occur. However, there is the potential for construction activities to slow emergency response times. Implementation of Mitigation Measure TRAFFIC-1 would reduce potentially significant impacts	See Traffic-1.	Implementation Responsibility: Project Manager from District Monitoring Frequency: During construction	Monitoring Responsibility: Construction Inspector; District	Initials

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
related to Fire Protection District and Sheriff Department response times to a <i>less-than-significant</i> level.				
Significance of Impact Before Mitigation: Potentially Significant				
Significance of Impact After Mitigation: Less than Significant				
TRANSPORTATION/TRAFFIC				
Impact TRAFFIC-1: Traffic Safety Construction activities would require temporary lane closures and detours around the work area. Minor delays may be experienced for emergency access to the residences adjacent to the work area. Detours would be available throughout the construction period in the event of an emergency to allow vehicles to drive around the work area. The trenches used to install pipe could be quickly covered in the event of an emergency to allow vehicles to drive through the work area, which would ensure the project does not prevent emergency access to nearby properties. This is a short term construction related impact that would cease upon project completion. Implementation of Mitigation Measures TRAFFIC-1	 Mitigation Measure TRAFFIC-1: Traffic Safety Local emergency services shall be notified prior to construction to inform them that traffic delays may occur, and also of the proposed construction schedule. The District shall require the contractor to provide for passage of emergency vehicles through the project site at all times. The District shall require the contractor to maintain access to all residences during project construction. 	Implementation Responsibility: Project Manager from District, District Staff, or Contractor Monitoring Frequency: During construction	Monitoring Responsibility: Construction Inspector; District	Initials

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
less than significant.				
Significance of Impact Before Mitigation: Potentially Significant				
Significance of Impact After Mitigation: Less than Significant				