ATTACHMENT A

Mitigation Monitoring and Reporting Program Compliance

Mitigation Monitoring and Reporting Program Compliance

Addendum No. 3 to the North San Diego Water Reuse Coalition Regional Recycled Water Project Program Environmental Impact Report (State Clearinghouse No. 2014081028) for the Upper and Lower San Luis Rey Water Reclamation Facility Recycled Water Conveyance System

Lead Agency:

City of Oceanside

300 North Coast Highway Oceanside, California 92054

JULY 2018

Printed on 30% post-consumer recycled material.

MITIGATION MONITORING AND REPORTING PROGRAM COMPLIANCE

INTRODUCTION

The City prepared its Integrated Master Plan Recycled Water Master Plan (RWMP) in 2015. The RWMP proposes a series of projects (RWMP project) to expand tertiary recycled water treatment capacity at the San Luis Rey Water Reclamation Facility (SLRWRF) from 0.7 MGD to 3.0 MGD initially and up to 6.0 MGD in the future and create two distribution systems, referred to as the Lower SLRWRF and Upper SLRWRF systems. The City of Oceanside is a member of the North San Diego Water Reuse Coalition (NSDWRC). Oceanside's RWMP is a component of the North San Diego Water Reuse Coalition Regional Recycled Water Project Final Program Environmental Impact Report (PEIR). The Final PEIR was certified by Olivenhain Municipal Water District (the Lead Agency) in October 2015 (2015). The City adopted a Mitigation and Monitoring Reporting Program (MMRP) for the City's portion of the North San Diego Water Reuse Coalition Regional Recycled Water Project a Mitigation and Monitoring Reporting Program (MMRP) for the City's portion of the North San Diego Water Reuse Coalition Regional Recycled Water Project Reuse Reuse Coalition Regional Recycled Reuse Coalition and Monitoring Reporting Program (MMRP) for the City's portion of the North San Diego Water Reuse Coalition Regional Recycled Water Project.

This document summarizes the analysis, conclusions, and compliance with the MMRP per Addendum No. 3 PEIR for the Upper and Lower San Luis Rey Water Reclamation Facility Recycled Water Conveyance System, as outlined in Table 1.

Mitigation Measure	Compliance Summary
Aesthetics	
MM 3.1-1a: Restoration to Pre-construction Conditions. The City of Oceanside shall require that its contractors restore disturbed areas associated with pipeline and associated below-ground facility installation to their pre-construction conditions, to the extent consistent with pipeline operations, so that short-term construction disturbance does not result in long-term impacts. The City of Oceanside/contractors will coordinate with relevant agencies for applicable project work.	To be implemented during the construction phase. Contractor requirements for surface improvement restoration will be incorporated into the construction bid documents.
 MM 3.1-1b: Screening Analysis and Mitigation for Protection of Scenic Resources. Upon formalization of proposed facility locations, the City of Oceanside shall conduct an internal, preliminary screening analysis to determine if above-ground facilities would be located within designated scenic vistas and resources, within areas covered by special overlay zones, or within the jurisdiction of a Local Coastal Program (LCP). As applicable, project components shall be designed to be consistent with relevant LCPs, including aesthetic requirements. All new above-ground facilities shall be sited, to the extent feasible, outside viewshed corridors and visually sensitive areas. Structures shall be located on the least visible portion of the selected site, and shall be sited so as to preserve unique visual features. If any of the above-ground facilities would be located within a visually sensitive area or have the ability to impact a visual or scenic resource, the City of Oceanside shall design facilities consistent with its regulations, and provide documentation required by the regulations to the relevant jurisdiction for review and approval. If required, the City of Oceanside shall also implement additional conditions to ensure compliance with requirements. These conditions may include, but not be limited to: Where needed, standalone buildings shall be architecturally treated to have a house-like façade. For storage tanks, partially bury the tanks if practical, or construct a berm around the tanks if scenic resources could be affected. For all above-ground facilities, landscaping shall be installed as appropriate to screen facilities from surrounding neighborhoods, soften the overall appearance of the proposed facilities by adding natural elements to an otherwise man-made appearance, and improve the appearance of the facility with naturalistic plantings based on a native drought-tolerant plant palette, and to control erosion and restore areas affected by construction.<!--</td--><td>Implemented during design phase as part of site selection. No scenic resources identified at above ground faculties.</td>	Implemented during design phase as part of site selection. No scenic resources identified at above ground faculties.
MM 3.1-3: Minimize Light and Glare. The City of Oceanside shall ensure that all permanent exterior lighting at the wastewater treatment plants and other above-ground facilities is directed downward and oriented to ensure that no	Implemented during design phase.

Mitigation Measure	Compliance Summary
light source is directly visible from neighboring residential areas. Highly reflective building materials and/or finishes shall not be used in the designs for proposed structures, unless required by law or for public safety. In accordance with Mitigation Measure MM 3.1-1b above, landscaping or other aesthetic-preserving measures shall be implemented around proposed facilities if deemed necessary. If incorporated, vegetation shall be selected, placed, and maintained to minimize off-site light and glare onto surrounding areas.	
Air Quality	
MM 3.3-2: Implementation of Practicable Air Pollution Control Measures. During design of all project components for which the City of Oceanside is the lead agency, the City shall identify measures that could be incorporated into project operation and construction to minimize emissions to the extent practicable. Potential mitigation measures could include control measures for PM10 (e.g., imposing speed limits on unpaved roads, covering haul trucks, limiting daily grading), control measures for NOx (e.g., grading or fuel use restrictions, using newer equipment), control measures for VOCs (e.g., use of VOC-free coatings, using VOC ERCs), or other control measures as appropriate. All project components shall implement air quality control measures, compliant with San Diego Air Pollution Control District rules and regulations, to the extent practicable, even where such components do not individually violate air quality standards, due to the cumulative impact on air quality from the Proposed Project.	To be implemented during the construction phase.
MM 3.3-5: Incorporate Odor Control into Facility Design. Consideration of objectionable odors shall be incorporated into the design of treatment facilities and treatment facility expansions. Appropriate odor control measures shall be implemented for those treatment facilities located in close proximity to sensitive receptors, and residential and commercial areas, and that are found to be likely to produce objectionable odors during project-level CEQA review. Examples of odor control measures could include installation of odor-controlled ventilation systems and air filters, enclosing certain facilities within structures, use of closed systems, implementation of BMPs, or others, as appropriate and applicable.	Not applicable.
Biological Resources	
MM 3.4-1a: Surveys and Mitigation for Sensitive Plant Species. Prior to the initiation of construction, the City of Oceanside shall conduct habitat assessments for sensitive plant species in areas of native habitat within construction zones, with focused surveys in areas where potentially suitable habitat for any species is identified. [As stated in the Program EIR (page 3.4-9), sensitive plant species with the potential to occur include Nevins barberry (<i>Berberis nevinii</i>) and Encinitas baccharis (<i>Baccharis vanessae</i>). Some areas within Oceanside are designated as critical habitat for thread-leaved brodiaea (<i>Brodiaea filifolia</i>), although potential habitat for this plant was not observed during preparation of the Program EIR.] If the surveys determine the absence of	A Biological Resources Technical Report (BTR) was prepared by Dudek, included as Appendix B to the Addendum, in compliance with this measure. Per the BTR, A pre-construction special-status plant species survey shall be conducted at the appropriate time of year to detect San Diego ambrosia and thread- leaved brodiaea in the grassland habitat at Mesa Pump

Mitigation Measure	Compliance Summary
 sensitive plant species habitats or individuals, no further surveys or mitigation is required. In the event that any sensitive plant species are found on site and it is infeasible to avoid impacts that are determined to be significant, mitigation would be required. The significance of impacts shall be based on an assessment by a professional botanist familiar with the species based on the listing status of the species and the size and regional significance of the population(s) found. The mitigation shall consist of a minimum 1:1 ratio based on plant numbers or acreage occupied by the population, as deemed appropriate, pursuant to a Mitigation and Monitoring Plan (MMP) prepared by a professional botanist. The MMP shall be consistent with recommendations provided by the regulatory agency (CDFW and/or USFWS), professional restoration ecologists, and/or professional botanists familiar with the potentially impacted species. Specific measures to be included in the MMP shall include one or more of the following elements, as appropriate for the species and population size and the type of impacts (temporary or permanent): Restoration of sensitive plant species on the affected site if the area is only affected temporarily during construction; this may include the collection of seed, cuttings, or entire plants from the temporary impact area prior to construction to allow for transplantation post-construction. Seeds and cuttings may be propagated at an approved nursery or botanical garden prior to transplantation. Protection of mitigation "set asides" and transplantation receiver site(s) as mitigation for permanent impacts, including the recordation of a conservation easement or deed restriction and related best management practices (BMPs) such as protective fencing; The selection of a transplantation receiver site or sites as mitigation for permanent impacts, including the recordation of a transplanta sa well as the minimization of impacts to existing quality habitat; Collectio	Station site and west end of Pala Road locations, pursuant to MM 3.4-1a. If surveys do not detect these plant species in the project area where construction activities would occur, no further action shall be necessary. If San Diego ambrosia, thread-leaved brodiaea, or other special-status plant species are detected at these locations that cannot be avoided by the proposed project, a Mitigation and Monitoring Plan (MMP) shall be prepared and approved by the City of Oceanside prior to construction that describes the details on the avoidance and/or compensation measures to be implemented to prevent impacts to these species, including trenchless construction, species translocation, or other methods appropriate to the species consistent with MM 3.4-1a and the Oceanside Subarea Plan narrow endemic policy.
MM 3.4-1b: Surveys and Mitigation for Sensitive Wildlife Species. Prior to the initiation of construction, the City of Oceanside shall conduct habitat assessments for sensitive wildlife	A BTR was prepared by Dudek, included as Appendix B to the Addendum, in compliance with this measure.

	Mitigation Measure	Compliance Summary
•	Avoid CAGN occupied habitat to the greatest extent feasible and preserve any mitigation areas in-perpetuity, as appropriate (see Mitigation Measure MM 3.4-2 below).	If elevated construction noise levels above 60 dB(A) Leq cannot be avoided in adjacent
•	Mitigate for any impacts to CAGN occupied habitat at a minimum 1:1 ratio of habitat restoration or creation either on site and/or off site on land acquired for the purpose of mitigation, or through the purchase of mitigation credits at an agency approved mitigation bank. Purchase of any mitigation credits shall occur prior to any habitat removal. Mitigation on land acquired for mitigation shall include the preservation, creation, restoration, and/or enhancement of similar habitat pursuant to a Habitat Mitigation and Monitoring Plan (HMMP). The HMMP shall be prepared prior to any impacts to the habitat, and shall provide details as to the implementation of the mitigation, maintenance, and future monitoring. The goal of the mitigation shall be to preserve, create, restore, and/or enhance similar habitat with equal or greater function and value than the impacted habitat.	habitat areas during the nesting season for these species, the following measures shall be implemented consistent with MM 3.4-2b:
•	Provide long-term management of mitigation habitat, if appropriate.	USFWS protocol methods and MM 3.4-2b. If protocol surveys determine
•	Avoid direct mortality of individual CAGN during construction by:	that these species are not nesting in
	 Removing any vegetation within CAGN occupied habitat outside the breeding season (the breeding season is February 15 to August 31) to the greatest extent feasible; and Monitoring by a qualified biologist during vegetation removal to flush out any non-breeding birds away from the clearing activities. 	 adjacent habitat with the potential to be affected by construction noise, no further action shall be necessary. If protocol surveys for coastal
•	Avoid indirect impacts to CAGN including noise impacts during construction and edge effects post-construction, by implementing measures to buffer and avoid human-wildlife conflicts as appropriate. Proposed measures are as follows:	California gnatcatcher, least Bell's vireo, and/or southwestern willow flycatcher identify nesting birds in adjacent habitat with the potential to
	During Construction	be affected by construction noise,
	 Construction noise shall not exceed 60 dB(A) Leq in avoided occupied coastal California gnatcatcher habitat between February 15 and August 31 unless noise attenuation measures are implemented to reduce noise levels below this level, or the USFWS approves noise levels above this threshold. Noise attenuation measures may include, but are not limited to, establishing construction set-back buffers, equipment noise mufflers, and noise walls, as determined necessary by an acoustic specialist and in consultation with the project biologist. Monitoring by a qualified biologist shall also occur during construction to ensure noise levels are maintained below the threshold. 	noise attenuation measures shall be implemented to reduce the noise level in the occupied habitat below 60 dB(A) Leq or approval from the USFWS shall be obtained to exceed this standard. Pursuant to the PEIR, noise attenuation measures shall include construction set-back

	Mitigation Measure	Compliance Summary
	Alternatively, construction noise levels above 60 dB(A) Leq may be approved by USFWS if monitoring by a USFWS permitted biologist for this species determines that the construction noise is not impacting the expected breeding behavior of the birds.	buffers, equipment noise mufflers, sound walls, or other approaches developed by the qualified biologist and noise monitor and approved by
	Post Construction	the City of Oceanside, consistent
	 Restricting access to any native habitat areas adjacent to new above-ground facilities, such as tanks, for example through installation of a fence around the perimeter and/or signs. 	with MM 3.4-1b.
	 Direction of all night lighting associated with new above-ground facilities away from adjacent habitat. 	
	 Implementation of an awareness program to educate the occupants/employees of new above-ground facilities about the conservation values associated with any adjacent habitat areas. 	
Lea	st Bell's Vireo, Southwestern Willow Flycatcher, and Western Yellow-Billed Cuckoo	
•	Avoid occupied habitat to the greatest extent feasible and preserve any mitigation areas in- perpetuity, as appropriate (see Mitigation Measure MM 3.4-2 below).	
•	Mitigate for any impacts to occupied habitat at a minimum 1:1 ratio of habitat restoration or creation either on site and/or off site on land acquired for the purpose of mitigation, or through the purchase of mitigation credits at an agency approved mitigation bank. Purchase of any mitigation credits shall occur prior to any habitat removal. Mitigation on land acquired for mitigation shall include the preservation, creation, restoration, and/or enhancement of similar habitat pursuant to a Habitat Mitigation and Monitoring Plan (HMMP). The HMMP shall be prepared prior to any impacts to the habitat, and shall provide details as to the implementation of the mitigation, maintenance, and future monitoring. The goal of the mitigation shall be to preserve, create, restore, and/or enhance similar habitat with equal or greater function and value than the impacted habitat.	
•	Provide long-term management of mitigation habitat, if appropriate.	
•	Avoid direct mortality of individual Least Bell's Vireo, Southwestern Willow Flycatcher, or Western Yellow-Billed Cuckoo during construction by:	
	 Removing any vegetation within occupied habitat outside the breeding season (the 	

Mitigation Measure	Compliance Summary
breeding season is March 15 to September 15); and	
 Monitoring by a qualified biologist during construction in adjacent areas to avoid inadvertent removal of occupied habitat. 	
 Avoid indirect impacts to Least Bell's Vireo, Southwestern Willow Flycatcher, or Western Yellow-Billed Cuckoo including noise impacts during construction by implementing the following proposed measures: 	
 Construction limits in and around potential habitat shall be delineated with flags and fencing prior to the initiation of any grading or construction activities. 	
 Prior to grading and construction a training program shall be developed and implemented to inform all workers on the project about listed species, sensitive habitats, and the importance of complying with avoidance and minimization measures. 	
 All construction work shall occur during the daylight hours. The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours determined by the City. 	
 During all excavation and grading on site, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards to reduce construction equipment noise to the maximum extent practical. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors (i.e., territory for Least Bell's Vireo, Southwestern Willow Flycatcher, and Western Yellow-Billed Cuckoo) nearest the project site. 	
 The construction contractor shall stage equipment in areas that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the project site during all project construction. 	
 Noise from construction activities shall be limited to the extent practical through the use of technology available to reduce construction equipment noise. Project-generated noise, both during construction and after the development has been completed, shall be in compliance with the requirements outlined in any local noise regulations to ensure that noise levels that the riparian area is exposed to do not exceed noise standards for residential areas. 	

	Mitigation Measure	Compliance Summary
	 The project shall be designed to minimize exterior night lighting while remaining compliant with local ordinances related to street lighting. Any necessary lighting (e.g., to light up equipment for security measures), both during construction and after construction has been completed, will be shielded or directed away from the nesting area and are not to exceed 0.5 foot-candles. Monitoring by a qualified lighting engineer (attained by the City of Oceanside for that project component) shall be conducted as needed to verify light levels are below 0.5 foot-candles required within identified, occupied least Bell's vireo territories, both during construction and at the onset of operations. If the 0.5 foot-candles requirement is exceeded, the lighting engineer shall make operational changes and/or install a barrier to alleviate light levels during the breeding season. 	
Bu	rrowing Owl	
•	Focused surveys for burrowing owl shall be conducted during the breeding season by a qualified biologist with experience conducting burrowing owl surveys, prior to vegetation clearing or ground disturbing activities. Surveys shall be conducted in suitable habitat as determined by the qualified biologist based on a field assessment of site conditions at the time of the survey, including habitats such as the ruderal and non-native grassland plant communities. The survey methodology shall follow the protocol provided as Appendix D of the Staff Report on Burrowing Owl Mitigation published by the California Department of Fish and Wildlife (March 7, 2012). Pursuant to this protocol four survey visits are required, including at least one site visit between February 15 and April 15, and a minimum of three survey visits at least three weeks apart between April 15 and July 15 (with at least one visit after June 15). The results of the focused surveys are typically considered valid for one year after completion.	
•	If burrowing owls are determined present following focused surveys, occupied burrows shall be avoided to the greatest extent feasible, following the guidelines in the 2012 Staff Report on Burrowing Owl Mitigation including, but not limited to, conducting pre-construction surveys, avoiding occupied burrows during the nesting and non-breeding seasons, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers. If occupied burrows cannot be avoided, acceptable methods may be used to exclude burrowing owl either temporarily	

Mitigation Measure	Compliance Summary
or permanently, pursuant to a Burrowing Owl Exclusion Plan that shall be prepared and approved by CDFW. The Burrowing Owl Exclusion Plan shall be prepared in accordance with the guidelines in the Staff Report on Burrowing Owl Mitigation. Habitat mitigation pursuant to the MSCP shall also be provided for occupied habitats subject to the approval of the implementing agency, at a minimum 1:1 ratio.	
Stephen's Kangaroo Rat and Other Sensitive Small Mammal Species	
• Avoid occupied or suitable habitat to the greatest extent feasible and preserve any mitigation areas in perpetuity, as appropriate (see Mitigation Measure MM 3.4-2 below)).	
 Mitigate for any impacts to occupied habitat at a minimum 2:1 ratio of habitat restoration or creation either on site and/or off site on land acquired for the purpose of mitigation, or through the purchase of mitigation credits at an agency approved mitigation bank. Purchase of any mitigation credits shall occur prior to any habitat removal. Mitigation on land acquired for mitigation shall include the preservation, creation, restoration, and/or enhancement of similar habitat pursuant to a Habitat Mitigation and Monitoring Plan (HMMP). The HMMP shall be prepared prior to any impacts to the habitat, and shall provide details as to the implementation of the mitigation, maintenance, and future monitoring. The goal of the mitigation shall be to preserve, create, restore, and/or enhance similar habitat with equal or greater function and value than the impacted habitat. 	
Provide long-term management of mitigation habitat.	
 Avoid direct mortality of individual sensitive small mammals during construction by: Installation of exclusionary fencing at the limits of construction within suitable habitat areas; and 	
 Live-trapping within suitable habitat in construction areas and the relocation of trapped individuals to one or more biologically appropriate receiver sites (defined as suitable habitat that is known to be unoccupied, is below population carrying capacity levels, and/or where scrub vegetation has been restored and colonization by the species has not occurred). Trapping shall be conducted by a USFWS permitted or approved biologist. 	
Avoid indirect impacts as a result of edge effects post-construction for new above-ground facilities adjacent to suitable habitat areas by implementing measures to buffer and avoid	

Mitigation Measure	Compliance Summary
human-wildlife conflicts as appropriate, such as installation of fencing or signage to restrict access, shielding night lighting away from the habitat areas, and educating the occupants/employees of the facilities as to the conservation value of the habitat areas.	
 MM 3.4-2: Native Habitat Compensation. Prior to the issuance of any grading permit in areas determined to support sensitive habitat communities, the City of Oceanside shall conduct a field assessment to confirm the presence/absence and extent of the communities. If sensitive plant communities are present and impacts to sensitive plant communities cannot be avoided, a Mitigation and Monitoring Plan (MMP) shall be prepared to offset impacts to those sensitive plant communities. The MMP shall focus on the restoration of equivalent habitat (for temporary impacts) or the restoration, enhancement or creation of equivalent habitats outside the impact area (for permanent impacts). In addition, the MMP shall provide details as to the implementation of the mitigation, maintenance, and future monitoring. Mitigation for impacts shall be offset in one or more of the following ways: Transplantation of the plant community species, Seeding of the plant community species, Planting of container plants of the plant community species, and/or Salvage of duff and seed bank and subsequent dispersal Off-site preservation at an established mitigation bank or other area dedicated for conservation. Mitigation ratios shall be 1:1 for temporary impacts by restoring to pre-project conditions. Ratios for permanent impacts shall be consistent with MSCP and MHCP ratios as outlined below for areas within approved subarea plans. For areas outside approved subarea plans, sensitive communities requiring mitigation would be those identified by CDFW as 'high priority'.¹ Mitigation for CDFW high priority communities shall be at a minimum 1:1 ratio for sensitive upland plant communities would be subject to approval by CDFW and/or USFWS if occupied by sensitive species) and at a minimum 2:1 ratio for sensitive riparian and wetland communities (the ratio of mitigation for riparian and wetland communities proved swolarea uplant communities would be subject to approval by CDFW and/or USFWS i	A BTR was prepared by Dudek, included as Appendix B to the Addendum, in compliance with this measure. Per the BTR, Prior to the issuance of grading permits for the proposed project, a Mitigation and Monitoring Plan (MMP) shall be prepared and approved by the City of Oceanside, pursuant to MM 3.4-2, that describes the details on the compensatory habitat mitigation that shall be implemented to offset the impacts to sensitive vegetation communities. At a minimum, the MMP shall include the approach, methods, locations, and specifications to mitigate for any sensitive vegetation communities shall be compensated according to the mitigation ratios specified in MM 3.4-2 and Oceanside Subarea Plan. Additionally as required in MM 3.4-2, temporary impacts to sensitive vegetation communities shall be restored to pre-project conditions at a 1:1 ratio. Construction of proposed project facilities will result in a total of 0.03 acres of permanent impact to non-native grassland, which based on MM 3.4-2 and the Oceanside Subarea Plan would require compensation at a 0.5:1 mitigation ratio. This impact would occur at the Mesa Pump Station site which is located in an area designated

¹ http://www.dfg.ca.gov/biogeodata/vegcamp/natural_communities.asp

Mitigation Measure				Compliance Summary
be subject to approval by the regulatory agencies during the perr the The City of Oceanside, mitigation ratios shall be consistent w <u>MHCP Conserved Plant Communities</u> The MHCP Plan is approved and being implemented at this time for unavoidable impacts to each habitat category under this plan mitigation criteria defined in the subarea plans, but shall be at ra- below. For impacts to Category A communities, mitigation shall consist habitat areas to meet the "no net loss" goal. It is assumed that re- displace nor convert other natural habitat areas to wetland veget disturbed or non-habitat areas. Restored habitat areas are assu an focused planning area (FPA), generally in the same watershe the impacted habitat. For impacts to Category B, C, D, and E communities, mitigation a conservation of habitat in an FPA. In some cases, habitat creating qualify as mitigation. For Category B communities, restored or co For Category C, D and E, conserved habitat may be out-of-kind, located in an FPA, or outside an FPA, if it is shown to be a viable preserve system.	with MSCP a . The require are pursuar tios no less of restoration estored or ne cation, but we med to be in the d and in the shall consist on or restoration if the conse	nd MHCP as red mitigatio to specific than those p n or creatior w areas wo ould replace h-kind and lo relative vici t of permane abitat will be rved habitat	s follows: n ratios provided n of new uld not ocated in nity of ent so in-kind. is	by the Oceanside Subarea Plan as a hardline preserve; a total of 0.10 acres (0.03 acres of non-native grassland; 0.07 acres of dirt road) of direct impact to Oceanside Subarea Plan hardline preserve would occur at this location. In order to offset the effects of the proposed project consistent with the PEIR and Oceanside Subarea Plan, a minimum of 0.10 acres of habitat conservation or habitat restoration shall be implemented in the Oceanside Subarea Plan El Corazon hardline preserve area to offset the loss of non-native grassland and hardline preserve from construction of the proposed project facilities. In order to compensate for the 0.11 acres of temporary impact to non-native grassland from the construction of project pipelines, a minimum of 0.11 acres of non-native grassland will be restored in-place consistent with MM 3.4-2 and the Oceanside Subarea Plan. The MMP prepared pursuant to this mitigation measure shall address all compensatory mitigation activities used to offset the 0.11 acres of temporary
Habitat Category Category A: Wetland/Riparian Coastal salt marsh, alkali marsh, freshwater marsh, estuarine, salt pan/mudflats, riparian forest, riparian	Locati Impacted Inside FPA ¹ No net lo table I	Habitat Outside FPA SS – See		impact and 0.10 acres of permanent impacts resulting from the proposed project.
woodland, riparian scrub, vernal pool, disturbed wetland, flood channel, or fresh water Category B: Rare Upland Beach, southern coastal bluff scrub, maritime succulent scrub, southern maritime chaparral, Engelmann oak	3:1	3:1		

Mitigation Measure		
woodland, coast live oak woodland, or native grassland		
Category C: Coastal Sage Scrub Coastal sage scrub or coastal sage scrub/chaparral mix	2:1	2:1
Category D: Chaparral Chaparral excluding southern maritime chaparral)	1:1	1:1
Category E: Annual Grasslands Annual non-native grassland	0.5:1	0.5:1
Category F: Other Lands Disturbed land including ruderal, agricultural land, or eucalyptus	None ²	None ²
¹ Primary conservation actions for natural habitat inside a be impact avoidance and minimization of unavoidable im habitat that is conserved through impact avoidance may the jurisdiction's mitigation guidelines, to satisfy the mitig associated with habitat impacts of development elsewher	pacts. Insid be used, su ation obliga	le a FPA, ubject to
² A local jurisdiction may require mitigation or levy of an in	-lieu mitiga	tion foo
for impacts to this habitat category if it finds that such act to meet the goals of the MHCP or the subarea plan.	tions are ne	ecessary
for impacts to this habitat category if it finds that such act to meet the goals of the MHCP or the subarea plan. Wetland Vegetation Community ¹	tions are ne Mitigati	on Ratio ²
for impacts to this habitat category if it finds that such act to meet the goals of the MHCP or the subarea plan. Wetland Vegetation Community ¹ Coastal salt marsh	tions are ne Mitigati	on Ratio ²
for impacts to this habitat category if it finds that such act to meet the goals of the MHCP or the subarea plan. Wetland Vegetation Community ¹ Coastal salt marsh Alkali marsh	tions are ne	on Ratio ² I:1 I:1
for impacts to this habitat category if it finds that such act to meet the goals of the MHCP or the subarea plan. Wetland Vegetation Community ¹ Coastal salt marsh Alkali marsh Estuarine	tions are ne	on Ratio ² I:1 I:1 I:1
for impacts to this habitat category if it finds that such act to meet the goals of the MHCP or the subarea plan. Wetland Vegetation Community ¹ Coastal salt marsh Alkali marsh Estuarine Saltpan/mudflats	tions are ne	on Ratio ² 4:1 4:1 4:1 4:1 4:1
for impacts to this habitat category if it finds that such act to meet the goals of the MHCP or the subarea plan. Wetland Vegetation Community ¹ Coastal salt marsh Alkali marsh Estuarine Saltpan/mudflats Oak riparian forest	tions are ne	ecessary on Ratio ² 4:1 4:1 4:1 4:1 3:1
for impacts to this habitat category if it finds that such act to meet the goals of the MHCP or the subarea plan. Wetland Vegetation Community ¹ Coastal salt marsh Alkali marsh Estuarine Saltpan/mudflats Oak riparian forest Riparian forest	tions are ne	ecessary on Ratio ² 4:1 4:1 4:1 4:1 3:1 3:1
for impacts to this habitat category if it finds that such act to meet the goals of the MHCP or the subarea plan. Wetland Vegetation Community ¹ Coastal salt marsh Alkali marsh Estuarine Saltpan/mudflats	tions are ne	ecessary on Ratio ² 4:1 4:1 4:1 4:1 3:1

Mitigation Measure		Compliance Summary	
Freshwater marsh	1:1 to 2:1		
Flood channel	1:1 to 2:1		
Disturbed wetlands	1:1 to 2:1		
Vernal pool	2:1 to 4:1		
¹ These communities are subject to the goal of no net loss ir			
and biological value. The highest priority will be given to im			
and minimization. Replacement of habitat subject to unavoid occur through restoration or creation of substitute habitat and			
the same kind and in the vicinity of the impacted habitat.	eas, generally of		
² Mitigation ratios applicable in areas subject to review by th Coastal Commission will be addressed in the cities' respect			
Such ratios may differ from those noted here.	ive subarea plans.		
MM 3.4-3: Complete Jurisdictional Determination and Mitigation as Applicable. Prior to any		A BTR was prepared by Dudek, included as Appendix B	
ground disturbing activities, the City of Oceanside shall conduct a jurisdictional delineation to confirm the presence and extent of features regulated by USACE, RWQCB, and/or CDFW. If		to the Addendum, in compliance with this measure.	
implementation of the project component results in unavoidable impacts to jurisdictional waters,			
the City of Oceanside shall obtain a CWA Section 404 permit from USACE, a CWA Section 401			Per the BTR, potential jurisdictional features would be avoided through jack and boring and/or HDD methods.
permit from RWQCB, and/or Streambed Alteration Agreement permit from CDFW. The following		Therefore, the first portion of this mitigation measure is	
mitigation shall be incorporated into the permitting, subject to approval by the regulatory		Ũ	no longer applicable.
agencies:			
On- and/or off-site replacement of USACE/RWQCB jurisdiction			
	U.S."/"waters of the State" at a ratio no less than 1:1 ("no net loss") for permanent impacts,		
and for temporary impacts to restore the impact area to pre-p			
project contours and revegetate as appropriate). Off-site repla purchase of mitigation credits at an agency-approved off-site		ine	
	•		
 On- and/or off-site replacement of CDFW jurisdictional stream habitat at a ratio no less than 2:1 for permanent impacts, and 			
restore the impact area to pre-project conditions (i.e., pre-pro			
as appropriate). Off-site replacement may include the purchas			
agency-approved off-site mitigation bank.			

Mitigation Measure	Compliance Summary	
If potential jurisdictional features are avoided through jack and boring and/or HDD methods, the following measure shall be incorporated into the project:		
 Prior to any ground disturbing activities, the USACE, RWQCB, and CDFW shall be notified of the proposed jack and boring and/or horizontal directional drilling (HDD) activities beneath jurisdictional features. If required by CDFW, a Streambed Alteration Agreement under Section 1602 of the California Fish and Game Code would be obtained. A plan to deal with potential frac-out release or other emergency shall be prepared by the contractor (or project engineer) for submittal to USACE, RWQCB, and CDFW, if requested, prior to the activities outlining the project as well as the provisions in place to avoid/contain pollutants in case of an accident (e.g., should frac-out release occur). 		
MM 3.4-4: Avoid Migratory Bird Nesting Season or Complete Surveys Before Construction Activities. If feasible, construction within or adjacent to vegetation suitable for migratory birds shall occur outside the nesting season (i.e., construction shall occur between September 1 through January 14) to avoid potential direct and indirect impacts to nesting birds. If vegetation removal is required during the nesting season, a qualified biologist shall survey all suitable habitats for the presence of nesting birds before commencement of clearing. If any active nests are detected, a buffer of at least 300 feet (500 feet for raptors) around the nest shall be delineated, flagged, and avoided until the nesting cycle is complete.	To be implemented prior and during construction.	
MM 3.4-5: Conduct Inventory of Trees Having the Potential to Be Impacted, Prepare Tree Protection Plans, and Acquire Permits as Required by Applicable Municipality or Jurisdiction. Prior to any ground disturbing activities that have a reasonable likelihood of damaging a tree's root system or requiring the trimming or removal of a tree, the City of Oceanside shall have a certified arborist conduct an assessment of the potentially affected tree(s). Permits shall be obtained, as needed, for tree removal. At such time any and all requirements shall be completed, including but not limited to the preparation of tree protection plans or acquisition of permits.	To be implemented prior and during construction, as required. If trimming or removal of a tree is necessary, a certified arborist will conduct an assessment and permits will be obtained, as needed, for tree removal.	
Cultural Resources		
MM 3.5-1a: Conduct a Phase I Historical Resources Assessment. The City of Oceanside shall conduct a Phase I Historical Resources Assessment of unevaluated potentially eligible historical resources that may be impacted by above ground structures in the Proposed Project, unless such analysis has been previously completed (i.e., at an existing treatment plant site). A Phase I Reconnaissance-Level Survey shall be performed for structures over 45-years in age located in proximity of proposed above-ground project components. A reconnaissance-level field survey for potentially historic buildings, structures, landscapes, and road infrastructure shall be conducted to determine whether	A Historic Built Environment Resources Inventory was prepared by Dudek, included as Appendix C1 to the Addendum, in compliance with this measure. The Fire Mountain site was identified as a potential historical resource (refer to MM 3.5-1d below). No other potential historical resources identified.	

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the project elements would directly or indirectly impact any historic resources. The project applicant shall engage a qualified historic preservation consultant who shall assess the significance and integrity of potential historic resources. A qualified architectural historian, historic architect, or historic preservation professional is someone who satisfies the Secretary of the Interior's Professional Qualification Standards for History, Architectural History, or Architecture, pursuant to 36 CFR 61, and has at least 10 years of experience in conducting historic surveys. If an identified property is found ineligible, no further evaluation would be required; however, if eligible historical resources are identified, a project-level impacts analysis shall be conducted for compliance with CEQA. If adverse impacts/effects are identified in the project-level impact analysis, the project may be redesigned to avoid or reduce potential impacts/effects to less than significant, in accordance with the Standards, or mitigation measures would be required. Such mitigation measures could include visual screening (tree rows), but would be highly variable, based on the types of impacts identified in the project-level evaluation. A project that conforms to the Secretary of the Interior's <i>Standards for Rehabilitating Historic Buildings</i> is considered fully mitigated under CEQA. The minimum level of effort for the Phase I assessment shall include historic aresources records searches through the South Central Coastal Information Center, the development of historic context for the project area, and a pedestrian survey of the project area. The assessment would include potentially eligible historic resources which were not previously evaluated.	
MM 3.5-1d Conduct Plan Review and Evaluation of Historical Resources – City of Oceanside. Prior to designing or implementing projects in this area, which includes facilities associated with Group G, City of Oceanside shall engage a qualified historic preservation consultant to assess identified resources for eligibility as historical resources and review the proposed projects for potential impacts to eligible historical resources. A qualified preservation consultant is an architectural historian, historic architect, or historic preservation professional who satisfies the Secretary of the Interior's Professional Qualification Standards for History, Architectural History, or Architecture, pursuant to 36 CFR 61, and has at least 10 years of experience in reviewing architectural plans for conformance to the Secretary's Standards and Guidelines. The City of Oceanside shall undertake and complete construction in a manner consistent with the preservation consultant's recommendations to ensure that the Project meets the <i>Secretary of the Interior's Standards for Rehabilitation</i> . The preservation consultant shall review the final construction drawings for conformance to the Secretary of the Interior's Standards and prepare a memo commenting on the final Project. A Project that conforms to the Secretary of the Interior's <i>Standards</i> is considered fully mitigated under CEQA.	An Evaluation of Historic Resources for the Fire Mountain site was prepared by Dudek, included as Appendix C2 to the Addendum, in compliance with this measure. The reservoir and the control building are not considered historical resources and no further resource management is required.
MM 3.5-2a: Conduct a Phase I Archaeological Resources Assessment. The City of Oceanside shall conduct a Phase I Archaeological Resources Assessment of the given improvement footprint to identify any archaeological resources within the footprint or immediate vicinity to support the project-level CEQA, unless such analysis has been	A Cultural Resources Inventory Report was prepared by Dudek, included as Appendix C3 to the Addendum, in compliance with this measure. Implementation of

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previously completed (i.e., at an existing treatment plant site). The minimum level of effort for the Phase I assessment shall include a cultural resources records searches through the South Central Coastal Information Center (if needed to update the records search performed for this Program EIR), a Sacred Lands File search through the Native American Heritage Commission and follow-up Native American consultation, and a pedestrian survey of the Study Area (Note: surveys may not be required in areas that do not have the native ground surface exposed such as paved streets). In addition, the City of Oceanside shall review available geotechnical studies, site plans, and drilling/grading studies relevant to their project component(s) to determine the nature and depth of the construction activities to assist in determining the depths of fill versus native soils across the improvement footprint. If no resources are identified as a result of the records search or survey, it does not preclude the existence of buried resources within the improvement footprint. If this is the case, a qualified archaeologist will determine the potential for the project to encounter buried resources during construction based on the results of the record searches, land use history, depth of native versus fill soils, and the proposed excavation parameters. If no resources are identified, no further analyses or mitigation shall be warranted, unless it can be determined that the project has a high or moderate potential to encounter buried archaeological resources; however, if resources are identified during the Phase I assessment, a Phase II assessment shall be conducted for compliance with CEQA.	mitigation measures MM 3.5-2c, MM 3.5-2d, MM 3.5-2e, and MM 3.5-4 would reduce potential adverse impacts to known and previously undiscovered cultural resources.
MM 3.5-2b: Conduct a Phase II Archaeological Resources Assessment and Mitigation. If resources are identified during the Phase I assessment, a Phase II Archaeological Resources Assessment may be warranted if impacts from the improvements cannot be avoided. The Phase II assessment shall evaluate the resource(s) for listing in the CRHR and to determine whether the resource qualifies as a "unique archaeological resource" pursuant to CEQA. If enough data is obtained from the Phase I assessment to conduct a proper evaluation, a Phase II evaluation may not be necessary. Methodologies for evaluating a resource can include, but are not limited to: subsurface archaeological test excavations, additional background research, and coordination with Native Americans and other interested individuals in the community. The methods and results of a Phase II evaluation shall be described in a technical report that will support the Cultural Section of the CEQA environmental document. If, as a result of the Phase II evaluation, resources are determined eligible for listing in the California Register (thus qualifying them as "historical resources" pursuant to CEQA Guidelines Section 15064.5) or are considered "unique archaeological resources shall be analyzed and if impacts are significant (i.e., the improvement would cause a "substantial adverse change" to the resource) and cannot be avoided, mitigation measures shall be developed and implemented to reduce impacts to the resources to a level that is less than significant.	A Cultural Resources Inventory Report was prepared by Dudek, included as Appendix C3 to the Addendum, in compliance with this measure. Per the Cultural Resources Inventory Report, a Phase II Archaeological Resources Assessment is not required and this measure is not applicable.

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resources mitigation program shall be developed. Such mitigation programs typically include additional subsurface archaeological excavations (i.e., data recovery) that serve to recover significant archaeological resources before they are damaged or destroyed by the proposed improvement. Documentation and recovered materials (artifacts and other specimens) are placed with a suitable museum for future study and research. Data recovery is typically recommended as a mitigation measure and is typically implemented after CEQA has been completed, but prior to issuance of grading or building permits. The methods and results of a data recovery program shall be described in a technical report that shall be submitted to the City of Oceanside and filed with the CHRIS-SCIC to show satisfactory compliance with the archaeological mitigation measures for a given project. It is possible that the archaeological excavations associated with the Phase II assessment could remove enough archaeological material from the resource as to negate the need to conduct a subsequent excavation.	
MM 3.5-2c: Conduct Archaeological Sensitivity Training for Construction Personnel. The City of Oceanside shall retain a qualified archaeologist who shall conduct an Archaeological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training session shall be carried out by a cultural resources professional with expertise in archaeology, will focus on how to identify archaeological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event. The training session will include a Power Point presentation and/or handouts for all attendees. The basic topics to be addressed in the session include: a brief cultural and archaeological history of the area and the Study Area; cultural resource compliance obligations; training in potential resources that may be encountered through the use of photographs or other illustrations; the duties of archaeological monitors; notification and other procedures to follow upon discovery of resources; and, the general steps that would be followed to conduct a salvage investigation if one is necessary.	To be implemented during the construction phase. A Cultural Resources Inventory Report was prepared by Dudek, included as Appendix C3 to the Addendum, in compliance with this measure. Per the Cultural Resources Inventory Report, MM-3.5-2 is only recommended for the Fire Mountain site and pipeline segments L1B, L18, U1, U3, and U5.
MM 3.5-2d: Monitor and Report Construction Excavations for Archeological Resources. The City of Oceanside shall retain a qualified professional archaeological monitor who shall be present during construction excavations such as clearing/grubbing, grading, trenching, or any other construction excavation activity associated with the proposed improvement. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full-time monitoring can be reduced to part-time inspections if determined adequate by the archaeological monitor. In the event that archaeological resources are unearthed during ground-disturbing activities, ground disturbing activities shall be halted or redirected away from the vicinity of the find so that the find can be evaluated. Work shall be allowed to continue outside of the vicinity of the find. All archaeological resources unearthed by Project construction activities shall be evaluated by the archaeologist. The City of Oceanside shall coordinate with the archaeologist to develop an appropriate treatment plan for the resources. Treatment may include implementation of archaeological	To be implemented during the construction phase. A Cultural Resources Inventory Report was prepared by Dudek, included as Appendix C3 to the Addendum, in compliance with this measure. Per the Cultural Resources Inventory Report, MM-3.5-2 is only recommended for the Fire Mountain site and pipeline segments L1B, L18, U1, U3, and U5, within 100 feet of known cultural resource sites.

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data recovery excavations to remove the resource or preserve it in place. The landowner, in consultation with the City of Oceanside and archaeologist, shall designate repositories in the event that archaeological material is recovered. The archaeological monitor shall prepare a final report at the conclusion of archaeological monitoring. The report shall be submitted to the City of Oceanside and CHRIS-SCIC, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures. The report shall include a description of resources unearthed, if any, evaluation of the resources with respect to the California Register of Historical Resources and CEQA, and treatment of the resources.	
MM 3.5-2e: Cease Ground-Disturbing Activities and Report if Archeological Resources are Encountered. If archaeological resources are encountered by construction personnel during implementation of the Project, ground-disturbing activities should temporarily be redirected from the vicinity of the find. Recognition of archaeological resources by construction personnel would be based on the training received under Mitigation Measure MM 3.5-2c. The City of Oceanside shall immediately notify a qualified archaeologist of the find. The archaeologist should coordinate with the City of Oceanside as to the immediate treatment of the find until a proper site visit and evaluation is made by the archaeological resources recovered will be documented on California Department of Parks and Recreation Site Forms to be filed with the CHRIS-SCIC. The archaeologist shall prepare a final report about the find to be filed with the District and the CHRIS-SCIC, as required by the California Office of Historic Preservation. The report shall include documentation and interpretation of resources recovered. Interpretation will include full evaluation of the resource's eligibility for listing in the California Register of Historical Resources and whether the resource qualifies as a unique archaeological resource. The landowner, in consultation with the City of Oceanside and the archaeologist, shall designate repositories to curate any material in the event that resources are recovered. The archaeologist shall also determine the need for archaeological monitoring for any ground-disturbing activities in the area of the find thereafter.	To be implemented during the construction phase.
MM 3.5-3a: Conduct Paleontological Sensitivity Training for Construction Personnel. Prior to substantive excavation in geological formations designated as having a moderate, moderate-to-high or high paleontological sensitivity in the Program EIR, the City of Oceanside shall retain a qualified paleontologist who shall conduct a Paleontological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training session shall be carried out by a professional with expertise in paleontology, and will focus on how to identify paleontological resources that may be encountered during earthmoving activities, and the procedures to be followed in such an event. The training session will include a Power Point presentation and/or handouts for all attendees. The basic topics to be addressed in the session include: a brief geologic history of the area and the City of Oceanside's paleontological resource compliance obligations; training in potential resources that may be encountered through the	To be implemented during the construction phase.

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use of photographs or other illustrations; the duties of paleontological monitors; notification and other procedures to follow upon discovery of resources; and, the general steps that would be followed to conduct a salvage investigation if one is necessary.	
MM 3.5-3b: Monitor and Report Construction Excavations for Paleontological Resources. A qualified professional paleontologist shall be retained to monitor excavation activities in certain areas of the project that would encounter fossiliferous geologic units that have been assigned "moderate", "moderate to high", and "high" potential as detailed in this report. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry screened sediment samples of promising horizons for smaller fossil remains. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known paleontological resources or fossiliferous geologic units, the materials being excavated (native versus fill soils), and the depth of excavation, and if found, the abundance and type of paleontological resources encountered. Full-time monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the paleontological monitor. If a potential fossil is found, the grading and excavation activities shall be temporarily diverted or redirected away from or around the area of the exposed fossil to facilitate evaluation and, if necessary, salvage. At the paleontologist's discretion and to reduce any construction delay, the grading and excavation contractor shall assist in removing rock samples for initial processing. Any fossils encountered and recovered shall be prepared to the point of identification and catalogued before they are donated to their final repository. Any fossils collected shall be donated to a public, non-profit institution with a research interest in the materials, such as the San Diego Natural History Museum. Accompanying notes, maps, and photographs shall also be filed at the repository. Upon completion of the above activities, the paleontologist shall prepare a report summarizing the results of the monitoring and salvaging efforts, the methodology used in these efforts, as well as a	To be implemented during the construction phase.
MM 3.5-4: Cease Ground-Disturbing Activities and Notify County Coroner If Human Remains Are Encountered. If human remains are unearthed during implementation of the Proposed Project, the City of Oceanside comply with State Health and Safety Code Section 7050.5. The City of Oceanside shall immediately notify the County Coroner and no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the	To be implemented during the construction phase.

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coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). The MLD may, with the permission of the City of Oceanside, inspect the site of the discovery of the Native American remains and may recommend to the City of Oceanside means for treating or disposing, with appropriate dignity, the human remains and any associated funerary objects. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the City of Oceanside to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and cultural items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the City of Oceanside has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The City of Oceanside shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment. MLDs in the region typically recommend reburial of the reburial with the NAHC and the project archaeologist shall file a record of the reburial with the NAHC and the project archaeologist shall file a record of the reburial with the CHRIS-SCIC. If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the City of Oceanside, the City of Oceanside or its authorized representative shall int		
Geology, Soils, and Seismicity		
MM 3.6-1a: Assess Potential for Liquefaction and Incorporate Protective Measures. During design of project components in areas shown as at risk for liquefaction, engineers shall assess potential for liquefaction through soils testing/surveys and incorporate protective measures as necessary. Pipelines shall be installed within consolidated, engineered backfill.	To be implemented during design phase.	
MM 3.6-1b: Stabilize Slopes During Construction. For facilities located within landslide risk areas, slopes shall be stabilized prior to and during construction activities. Such stabilization may include grading to reduce the slope, removal of unstable soils and materials, or an appropriate slope stabilization method.	To be implemented during construction, as required.	
Hazards and Hazardous Materials		
MM 3.8-1: Preparation of Hazardous Materials Business Plan. For any treatment facilities using hazardous	Not applicable.	

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materials and chemicals, as well as for pump stations that store hazardous materials and chemicals, the City of Oceanside shall prepare and implement a Hazardous Materials Business Plan (HMBP). The HMBP shall include, at minimum, a hazardous materials inventory, site plan, an emergency response plan, and requirements for employee training.	
MM 3.8-2a: Identification of Potential Hazardous Materials Exposure. During project design, the City of Oceanside shall consult the hazardous sites databases (GeoTracker and EnviroStor) to identify potential hazardous sites and avoid them where practical. For project components to be constructed within the County of San Diego, the City of Oceanside shall also identify sites within 250 feet of the project that contain burn ash and sites within 1,000 feet of formerly used defense sites in this analysis, in accordance with the County of San Diego's Guidelines for Determining Significance: Hazardous Materials and Existing Conditions (County of San Diego 2007b). If a known hazardous site is unavoidable, a Phase I Environmental Site Assessment shall then be performed by a qualified environmental professional to clarify known hazardous materials cases in the vicinity of the project construction area. Follow-up sampling would be conducted if needed to characterize soil and groundwater quality before the start of construction. Prior to construction, contractors shall be informed of the location of potential areas of hazardous materials that may be encountered during construction, and shall ensure that safety precautions are in place to avoid or minimize exposure to potentially contaminated soils, and to reduce the potential for accidental damage to underground storage tanks that could cause accidental release of hazardous materials into the environment.	A Preliminary Environmental Site Assessment (Preliminary ESA) prepared by Dudek, included as Appendix D to the Addendum, in compliance with this measure. Potential hazardous materials sites have been identified adjacent to pipeline segments L1B, L19, U1, U2, and U3. Per the Preliminary ESA, compliance with mitigation measure MM 3.8-2c would reduce impacts.
MM 3.8-2b: Hazardous Materials Management and Spill Prevention and Control Plan. Before construction begins, all construction contractors shall be required to develop and implement a Hazardous Materials Management and Spill Prevention and Control Plan that includes project-specific contingency plan for hazardous materials and waste operations. The Plan shall establish policies and procedures consistent with applicable codes and regulations, including but not limited to the California Building and Fire Codes, and federal and California Occupational Safety and Health Administration (OSHA).	To be implemented prior and during the construction phase. Requirements will be incorporated into construction bid documents.
MM 3.8-2c: Contaminated Soil Contingency Plan. If contaminated soil is encountered during project construction, work shall halt and an assessment made to determine the extent of contamination. A Contaminated Soil Contingency Plan shall be developed and implemented to handle treatment and/or disposal of contaminated soils.	 To be implemented during the construction phase. Per the Preliminary ESA, it is recommended that the Contaminated Soil Contingency Plan include the following: Identification of known areas of soil contamination, including constituents of concern, on/near project site

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	 Anticipated constituents of concern (COCs; hazardous waste/materials) that may be encountered Procedures for characterizing and managing impacted materials, including emergency response procedures Dewatering contingency options Stormwater management options Regulatory considerations Worker health and safety plan for management of contaminated materials Copies of the contingency plan and health and safety plan should be maintained onsite during excavation and construction of the proposed project. All workers on the project site should be familiarized with these documents. 	
MM 3.8-7: Develop and Maintain Emergency Response Strategies. Prior to construction, the City of Oceanside shall develop strategies for emergency response within their construction area in coordination with local emergency services. Strategies shall include, but are not limited to, maintaining access over trenches through the use of steel trench plates, identification of alternate routes, and notification of local emergency services of timing and location of construction activities.	To be implemented during the construction phase. Requirements will be incorporated into construction bid documents.	
MM 3.8-8: Prevention of Fire Hazards. The City of Oceanside shall require that construction equipment staging areas shall be cleared of dried vegetation or other material that could ignite, and equipment that heats up during use shall be stored only in areas cleared of vegetation. All equipment shall be kept in good working order and equipped with spark arrestors to prevent potential sparks, and a spotter shall be utilized during all welding activities. Fire extinguishers shall be made available at all construction sites, and construction employees shall be trained on proper fire safety and prevention measures.	To be implemented during the construction phase. Requirements will be incorporated into construction bid documents.	
Hydrology and Water Quality		
MM 3.9-3 Conduct Potable Reuse Technical Investigations and Mitigation. To the extent that the City of Oceanside is a lead agency for potable reuse components involving surface water reservoirs or groundwater basins, it	Not applicable.	

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shall conduct the necessary technical studies and modeling to characterize the existing condition of the water body(s) and the anticipated effects from potable reuse operation, on both volume and water quality. Recommendations of the technical analyses shall be incorporated into the subsequent environmental documentation to ensure that potable reuse operations are compliant with the appropriate San Diego RWQCB (NPDES) or DDWEM (GRRP) permits. The surface and groundwater basins used for potable reuse operations shall be managed to ensure that overdraft does not occur. Dilutant water could be provided, as directed by RWQCB and DDWEM, to ensure that water quality is protected within relevant water bodies. Advanced treatment of the recycled water would be expected to include microfiltration, reverse osmosis, advanced oxidation, and disinfection, but details of treatment processes could be adjusted to ensure appropriate water quality for the discharge or injection. Water quality could also be ensured by specifying appropriate locations of discharge, percolation, or injection areas and extraction areas, to allow adequate residence times in the water body.	
MM 3.9-4 Stormwater Capacity at Above-Ground Facilities. The City of Oceanside shall design and install/improve onsite stormwater facilities to accommodate runoff from above-ground facilities such that flooding would not occur offsite. Landscaped or other pervious areas may be designed and constructed to effectively receive and infiltrate, retain, and/or treat runoff from impervious areas, prior to discharging to the MS4. Onsite stormwater facilities may include biofiltration swales, retention ponds, and other low impact development (LID) techniques.	To be implemented during design.
Noise	
MM 3.12-1a: Noise and Vibration Control During Construction. The City of Oceanside shall incorporate into contract specifications for all proposed components the noise and vibration control measures sufficient to meet City of Oceanside noise control standards (this is typically sound no greater than 86 dBA at a distance of 50 feet from the project site). These measures may include:	To be implemented during the construction phase. Requirements will be incorporated into construction bid documents.
• Impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for project construction will be hydraulically or electrically powered whenever practical to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust would be used. This muffler can lower noise levels from the exhaust by up to 10 dBA. External jackets on the tools themselves would be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures will be used such as drilling rather than impact equipment whenever feasible.	
• Wherever practical, sonic or vibratory pile drivers will be used instead of impact pile drivers.	

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	If sonic or vibratory pile drivers are not feasible, acoustical enclosures will be provided as necessary to reduce noise levels. Engine and pneumatic exhaust controls on pile drivers will be required as necessary to ensure that exhaust noise from pile driver engines are minimized to the extent feasible. Where feasible, pile holes will be pre-drilled to reduce potential noise and vibration impacts. No impact pile drivers shall be used in the vicinity of sensitive receptors unless necessary. For above-ground facilities, temporary noise barriers may be erected at some locations to reduce noise impacts to residents adjacent to construction sites.	
•	Comply with compaction standards for backfill. Vibration generated during soil compaction may be minimized by using a small compactor.	
•	During sheetpile driving for the trench excavation, use the following measures: pushing the sheetpile in as far as practical with the excavator CAT before using the vibrator; using a small, hand-operated vibratory hammer or one with a different operational frequency to further reduce the vibration potential; flooding the soils before tamping with the vibrator; and/or operating the vibratory CAT with "throttling" when a vibrator must be used.	
•	All equipment and trucks used for project construction shall use the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) and be maintained in good operating condition to minimize construction noise impacts. All internal combustion engine-drive equipment shall be fitted with intake and exhaust mufflers which are in good condition.	
•	Unnecessary idling of internal combustion engines shall be prohibited. In practice, this would mean turning off equipment if it would not be used for five or more minutes.	
•	Stationary noise-generating construction equipment, such as air compressors and generators, shall be located as far as practical from homes and businesses.	
•	Staging areas shall be located as far as feasibly practical from sensitive receptors.	
•	For construction activities anticipated to generate noise above local standards even with the noise attenuation measures listed above, timing and length of construction activities generating excessive noise shall be adjusted to maintain average or impulsive noise levels within acceptable limits, as set forth in applicable local regulations.	

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MM 3.12-1b: Pre-Construction Notification. Prior to construction, written notification to residents within 500 feet of the proposed facilities undergoing construction shall be provided, identifying the type, duration, and frequency of construction activities. This measure shall not apply to linear Project elements such as pipelines. Notification materials shall also identify a mechanism for residents to register complaints with City of Oceanside if construction related noise impacts should occur.	To be implemented during the construction phase.
MM 3.12-1c: Noise and Vibration Minimization during Operation. The City of Oceanside shall design the proposed pumps and mechanic, noise-generating equipment at treatment plants to ensure that operational noise levels at the property line do not exceed the affected jurisdictions' noise ordinance standards. The City of Oceanside shall implement the following noise minimization measures to the extent they are feasible and necessary to meet the City of Oceanside's noise ordinance standards:	An Environmental Noise Assessment was prepared by Dudek, included as Appendix E to the Addendum, in compliance with this measure. Per the Environmental Noise Assessment, none of the proposed pump stations would exceed the City's noise ordinance standards.
• Noise-generating facilities shall be located as far away from sensitive receptors as practical.	
• Shielding and other specified measures as deemed appropriate and effective by the design engineer would be incorporated into the design to comply with performance standards.	
 Project equipment shall be outfitted and maintained with noise-reduction devices such as equipment closures, fan silencers, mufflers, acoustical louvers, vents, noise barriers, and acoustical panels to minimize operational noise. 	
 The orientation of any necessary acoustical exits shall always be facing away from nearby sensitive receptors. 	
• Berms or noise walls shall be incorporated, where appropriate, to absorb and/or redirect noise away from nearby sensitive receptors. Contractors shall test each pump and its drive system and any other mechanical devices that generate vibration after installation to confirm that the equipment has been properly installed, aligned and connected, is free of defects and excessive noise and vibration. If the testing indicates noncompliance with the affected jurisdictions' noise ordinances, additional measures (e.g., installation of sound proofing material inside the wall; installation of sound dampening material around the valves) shall be taken until compliance can be demonstrated.	
MM 3.12-2: Geotechnical Evaluation and Mitigation. Once the locations of the proposed	To be implemented during design.

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facilities have been identified, The City of Oceanside shall determine the type of structures that would be located in the vicinity of the proposed facilities. The City of Oceanside retain a licensed geotechnical engineer(s) to prepare design-level geotechnical evaluations to include verification that performance standards for vibration impacts, as established by the Caltrans vibration damage potential guidelines, can be attained. The City of Oceanside shall include trench- excavation and trench-wall support systems designed to protect against settlement and vibration impacts, where structures and other utilities are in close proximity to the proposed excavation, in accordance with Occupational Safety and Health Administration (OSHA) standards or as designed by a registered engineer. All recommendations to attain these performance standards shall be incorporated into the project design.		
Recreation		
MM 3.15-1: Minimize Storage of Construction Equipment Near Recreational Facilities. To the extent practical, The City of Oceanside shall attempt to locate construction staging areas away from open space and recreational facilities and viewsheds. Locating these staging areas away from recreational facilities and viewsheds will reduce the visual impacts associated with locating these staging areas near or adjacent to recreational facilities. If a staging area must be located near or adjacent to a recreational facility, the City of Oceanside shall make every reasonable attempt to keep the area free and clean of rubbish and debris by promptly removing all such material from the site so as not to detract from the overall experience of the recreational facility.	To be implemented during the construction phase.	
Transportation and Traffic		
MM 3.16-1: Traffic Management Plan. Prior to construction of each project component, a traffic management plan shall be developed and implemented. Such a plan shall include, but is not limited to, determination of construction staging site locations and potential road closures, as well as identify alternate routes for detours, and planned routes for construction-related vehicle traffic, and identification of alternative safe routes and policies to maintain safety along bike routes during construction. For those Groups with pipelines located within the County of San Diego whose construction would require road closures, the traffic management plan shall incorporate the relevant policies and measures applicable to road closures as described in the County of San Diego's Traffic Guidelines. As part of plan development, the City of Oceanside shall coordinate with the police, fire, and other emergency services to alert these entities about potential construction delays. To the extent practical, the City of Oceanside shall minimize the duration of disruptions/closures to roadways and critical access points for emergency services. The City of Oceanside shall	Staging areas and haul routes will be identified in the construction bid documents and contractor will be required to submit traffic control plans to the City of Oceanside for approval prior to construction. Traffic control plans for work impacting Caltrans right-of-way will be also be submitted to Caltrans for approval.	

Mitigation Measure	Compliance Summary	
also coordinate with any affected recreational facilities owners/operators to minimize the duration of disruptions/closures to recreational facilities and adjacent access points. The traffic management plan shall provide for traffic control measures including flag persons, warning signs, lights, barricades and cones to provide safe passage of vehicular, bicycle and pedestrian traffic and access by emergency responders. This plan shall be submitted to local planning or public works departments for review, and any necessary permits acquired prior to construction.		
MM 3.16-4: Rail Crossing Plan. During design and construction of pipelines that include railway crossings, all efforts shall be made to design and construct pipelines in such a manner to avoid interruption or delay of rail service. If such interruption cannot be feasibly avoided, construction or activities that interrupt service shall not occur during morning or evening commute times, and alternative service (e.g., shuttle) shall be provided during rail service interruption. Notification of the extent, location, and duration of potential service interruption shall be posted at all transit stations serving the impacted railway.	Two crossings of NCTD tracks are planned for pipeline installation: at El Camino Real and Rancho Del Oro Drive. Both crossings will be constructed using trenchless methods; therefore, interruption of rail service is not anticipated. Permits with NCTD will be obtained prior to construction.	
Environmental Justice		
MM 5.1-1 Screening Analysis and Mitigation of Potential Environmental Justice Impacts. Once project facilities are finalized, the City of Oceanside shall conduct a screening-level environmental justice analysis, using the most recent income and demographic data available at that time. For those project components found to be constructed within or near an environmental justice community, efforts shall be made to reduce environmental justice impacts to less than significant levels. These efforts may include, but are not limited to, avoiding environmental justice communities when making design decisions (e.g., moving pipeline alignments to avoid environmental justice communities), incorporating impact-reducing features into facility design (e.g., include additional sound-proofing or odor control measures in facility design), and including additional mitigation measures to further reduce any potentially disproportionate impacts to environmental justice communities.	One disadvantaged community is identified near the Mesa Pump Station site. Additional screening and noise control measures have been incorporated into the design of this facility.	