Mitigation Monitoring and Reporting Program for the Hilby Avenue Pump Station and Monterey Pipeline

#### Mitigation Monitoring and Reporting Program Hilby Avenue Pump Station (June 14, 2016)

Section 21081.6 of the Public Resources Code requires all state and local agencies to establish monitoring or reporting programs whenever approval of a project relies upon an environmental impact report (EIR). The purpose of the monitoring and reporting program is to ensure implementation of the measures being imposed to mitigate or avoid the significant adverse environmental impacts identified in the Aquifer Storage and Recover EIR/EA and the Pure Water Monterey Groundwater Replenishment Project EIR as amended in the Hilby Avenue Pump Station Addendum.

The following table contains text edits to the Mitigation Measures shown in strikeout for deleted text and underline for added text. These changes have been made to the mitigation measures to make them applicable to the Hilby Avenue Pump Station.

	Timing of	Responsible Party			
Mitigation Measure	Implementation Implementation		Compliance/ Verification	Done (X)	
AIR QUALITY					
<ul> <li>Mitigation Measure AQ-1: Construction Fugitive Dust Control Plan. (PWM/GWR EIR)</li> <li>The following standard Dust Control Measures shall be implemented during construction to help prevent potential nuisances to nearby receptors due to fugitive dust and to reduce contributions to exceedances of the state ambient air quality standards for PM<sub>10</sub>, in accordance with MBUAPCD's CEQA Guidelines.</li> <li>a) Water all active construction areas as required with non-potable sources to the extent feasible; frequency should be based on the type of operation, soil, and wind exposure and minimized to prevent wasteful use of water.</li> <li>b) Prohibit grading activities during periods of high wind (over 15 mph).</li> <li>c) Cover all trucks hauling soil, sand, and other loose materials and require trucks to maintain at least 2 feet of freeboard.</li> <li>d) Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites.</li> <li>e) Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets;</li> <li>f) Enclose, cover, or water daily exposed stockpiles (dirt, sand, etc.);</li> <li>g) Replant vegetation in disturbed areas as quickly as possible.</li> <li>h) Wheel washers shall be installed and used by truck operators at the exits of the construction sites to the AWT Facility site, the Injection Well Facilities, and the</li> </ul>	During Construction	CalAm and construction contractor	CalAm and MPWMD		

Mitigation Monitoring and Reporting Program for the Hilby Avenue Pump Station and Monterey Pipeline

	i) Post a publicly visible sign that specifies the telephone number and person to				
	contact regarding dust complaints. This person shall respond to complaints and				
	take corrective action within 48 hours. The phone number of the MBUAPCD				
	shall also be visible to ensure compliance with MBUAPCD rules.				
Mi	tigation Measure AQ-1: Use Newer, Cleaner-Burning Engines. (ASR EIR/EA)				
The	e project applicant will encourage all construction contractors that use equipment				
wit	h diesel engines to use as much equipment as possible that meets EPA Tier II engine	During	Construction	CalAm and	
sta	ndards. The project applicant will also encourage construction contractors to install	Construction	contractor	MPWMD	
die	sel particulate matter filters and lean-NOx or diesel oxidation catalysts in all				
eq	uipment, especially equipment that doesn't meet Tier II engine standards.				
BIC	DLOGICAL RESOURCES				
Mi	tigation Measure BT-1a: Implement Construction Best Management Practices.				
(P\	NM/GWR EIR)				
The	e following best management practices shall be implemented during all identified				
pha	ases of construction (i.e., pre-, during, and post-) to reduce impacts to special-status				
pla	nt and wildlife species:				
1)	A qualified biologist must conduct an Employee Education Program for the				
	construction crew prior to any construction activities. A qualified biologist must				
	meet with the construction crew at the onset of construction at the site to educate				
	the construction crew on the following: 1) the appropriate access route(s) in and				
	out of the construction area and review project boundaries; 2) how a biological				
	monitor will examine the area and agree upon a method which would ensure the	Prior to			
	safety of the monitor during such activities, 3) the special-status species that may	commencement	Construction	CalAm and	
	be present; 4) the specific mitigation measures that will be incorporated into the	of construction,	contractor		
	construction effort; 5) the general provisions and protections afforded by the	During	contractor		
	USFWS and CDFW; and 6) the proper procedures if a special-status species is	Construction			
	encountered within the site.				
2)	Trees and vegetation not planned for removal or trimming shall be protected prior				
	to and during construction to the maximum extent possible through the use of				
	exclusionary fencing, such as hay bales for herbaceous and shrubby vegetation, and				
	protective wood barriers for trees. Only certified weed-free straw shall be used, to				
	avoid the introduction of non-native, invasive species. A biological monitor shall				
	supervise the installation of protective fencing and monitor at least once per week				
	until construction is complete to ensure that the protective fencing remains intact.				
3)	Protective fencing shall be placed prior to and during construction to keep				
	construction equipment and personnel from impacting vegetation outside of work				

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Mitigation Monitoring and Reporting Program for the Hilby Avenue Pump Station and Monterey Pipeline

		r		
limits. A biological monitor shall supervise the installation of protective fencing and				
monitor at least once per week until construction is complete to ensure that the				
protective fencing remains intact.				
4) Following construction, disturbed areas shall be restored to pre-construction				
contours to the maximum extent possible and revegetated using locally-occurring				
native species and native erosion control seed mix, per the recommendations of a				
qualified biologist.				
5) Grading, excavating, and other activities that involve substantial soil disturbance				
shall be planned and carried out in consultation with a qualified hydrologist,				
engineer, or erosion control specialist, and shall utilize standard erosion control				
techniques to minimize erosion and sedimentation to native vegetation (pre-				
, during, and post-construction).				
6) No firearms shall be allowed on the construction sites at any time.				
7) All food-related and other trash shall be disposed of in closed containers and				
removed from the project area at least once a week during the construction period,				
or more often if trash is attracting avian or mammalian predators. Construction				
personnel shall not feed or otherwise attract wildlife to the area.				
8) To protect against spills and fluids leaking from equipment, the project proponents				
shall require that the construction contractor maintains an on-site spill plan and on-				
site spill containment measures that can be easily accessed.				
9) Refueling or maintaining vehicles and equipment should only occur within a				
specified staging area that is at least 100 feet from a waterbody (including riparian				
and wetland habitat) and that has sufficient management measures that will				
prevent fluids or other construction materials including water from being				
transported into waters of the state. Measures shall include confined concrete				
washout areas, straw wattles placed around stockpiled materials and plastic sheets				
to cover materials from becoming airborne or otherwise transported due to wind				
or rain into surface waters.				
10) The project proponents and/or their contractors shall coordinate with the City of				
Seaside on the location of the Pump Station Injection Well Facilities and the				
removal of sensitive biotic material.				
CULTURAL RESOURCES				
Mitigation Measure CR-1: Stop Work If Buried Cultural Deposits Are Encountered				
during Construction Activities. (ASR EIR/EA)	During	Construction	CalAm and	
If buried cultural resources such as chipped stone or groundstone, historic debris,	Construction	contractor	MPWMD	
building foundations, or human bone are inadvertently discovered during ground-				

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Mitigation Monitoring and Reporting Program for the Hilby Avenue Pump Station and Monterey Pipeline

disturbing activities, the construction contractor will stop work in that area and within a				
100-foot radius of the find until a qualified archaeologist can assess the significance of				
the find and, if necessary, develop appropriate treatment measures. Treatment				
measures typically include avoidance strategies or mitigation of impacts through data				
recovery programs such as excavation or detailed documentation.				
Mitigation Measure CR-2: Stop Work If Human Remains Are Encountered during				
Construction Activities. (ASR EIR/EA)				
If human skeletal remains are encountered, the construction contractor will notify				
CalAm MPWMD and the county coroner immediately. CalAm -MPWMD-will ensure the				
construction specifications include this order.				
If the county coroner determines that the remains are Native American, the coroner				
will be required to contact the NAHC (pursuant to Section 7050.5 [c] of the California				
Health and Safety Code) and the County Coordinator of Indian Affairs. A qualified				
archaeologist will also be contacted immediately.				
If human remains are discovered in any location other than a dedicated cemetery,				
there will be no further excavation or disturbance of the site or any nearby area				
reasonably suspected to overlie adjacent human remains until:				
• the coroner of the county has been informed and has determined that no				
investigation of the cause of death is required; and				
• if the remains are of Native American origin:	During	Construction	CalAm and	
<ul> <li>the descendants from the deceased Native Americans have made a</li> </ul>	Construction	contractor	MPWMD	
recommendation to the landowner or the person responsible for the				
excavation work for means of treating or disposing of with appropriate				
dignity the human remains and any associated grave goods as provided				
in Public Resources Code Section 5097.98: or				
• the NAHC was unable to identify a descendent or the descendent failed				
to make a recommendation within 24 hours after being notified by the				
commission.				
According to the California Health and Safety Code, six or more human burials at one				
location constitute a cemetery (Section 8100), and disturbance of Native American				
cemeteries is a felony (Section 7052). Section 7050.5 requires that construction or				
excavation be stopped in the vicinity of discovered human remains until the coroner				
can determine whether the remains are those of a Native American. If the remains are				
determined to be Native American, the coroner must contact the NAHC.				
NOISE				
Mitigation Measure NZ-1a: Prohibit Ancillary and Unnecessary Equipment During	During	Construction	CalAm and	
Denise Duffy and Associates				Page 4

Mitigation Monitoring and Reporting Program for the Hilby Avenue Pump Station and Monterey Pipeline

Nighttime Construction Well Drilling Activities. (ASR EIR/EA)	Construction	contractor	MPWMD	
The project applicant shall ensure that the construction contractor prohibit the use of				
all ancillary equipment (i.e., backhoe, truck, air compressor, and pump, etc.) during				
nighttime hours. Cleanup and other activities will occur only during daytime activities.				
Mitigation Measure NZ-1b: Employ Noise-Reducing Construction Practices to Meet				
Nighttime Standards. (ASR EIR/EA)				
The construction contractor will employ noise-reducing construction practices such that				
nighttime standards are not exceeded. Measures that will be used to limit noise				
include, but are not limited to:	During	Construction	CalAm and	
<ul> <li>using noise-reducing enclosures around noise-generating equipment;</li> </ul>	Construction	contractor	MPWMD	
<ul> <li>constructing barriers between noise sources and noise-sensitive land uses or</li> </ul>				
taking advantage of existing barrier features (terrain, structures) to block sound				
transmission; and				
<ul> <li>enclosing equipment.</li> </ul>				
Mitigation Measure NZ-1c: Prepare a Noise Control Plan. (ASR EIR/EA)				
The construction contractor will prepare a detailed noise control plan based on the				
construction methods proposed. This plan will identify specific measurement that will	Drior to			
be taken to ensure compliance with the noise limits specified above. The plan shall also	Phone to	Construction	CalAm and	
identify anticipated construction schedule, notification procedures, and contact	of construction	contractor	MPWMD	
information for noise related complaints. The noise control plan will be reviewed and	of construction			
approved by City of Seaside staff before any noise-generating construction activity				
begins.				

Mitigation Monitoring and Reporting Program for the Hilby Avenue Pump Station and Monterey Pipeline

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Mitigation Monitoring and Reporting Program for the Hilby Avenue Pump Station and Monterey Pipeline

#### MITIGATION MONITORING AND REPORTING PROGRAM

#### for the Monterey Pipeline (previously the Alternative Monterey Pipeline in the Pure Water Monterey Groundwater Replenishment Project)

June 14, 2016

#### INTRODUCTION

Section 21081.6 of the California Public Resources Code and Section 15091(d) and Section 15097 of the California Environmental Quality Act (CEQA) Guidelines require public agencies "to adopt a reporting or monitoring program for changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment." This Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the Pure Water Monterey Groundwater Replenishment (GWR) Project's Alternative Monterey Pipeline. This MMRP is based on the mitigation measures included in the Final Environmental Impact Report (EIR).

This MMRP is applicable to the "Alternative Monterey Pipeline" of the GWR Project that is referenced as the Monterey Pipeline in the MPWMD consideration of the CalAm Water Distribution System Permit Amendments being considered in June 2016. Therefore, this MMRP includes mitigation measures, monitoring and reporting requirements identified in the Final EIR for this project component, and it does not include all mitigation measures applicable to the ASR Project nor the GWR Project. The original MMRP for the ASR Project is Chapter 4 of the Final Phase 1 EIR/EA, as amended by the Phase 2 Addendum accepted in April 2012.<sup>1</sup> The original MMRP for the PWM/GWR Project can be found in Section 5 of Volume IV of the Consolidated Final EIR found at <a href="http://purewatermonterey.org/reports-docs/cfeir/">http://purewatermonterey.org/reports-docs/cfeir/</a>. These MMRPs included mitigation measures applicable to operation of the ASR Wells 1 through 4, and construction and operation of the Monterey Pipeline (referred to as the Alternative Monterey Pipeline in the PWM/GWR MMRP).

For a complete list of acronyms used in this document, please refer to the acronym list in the EIRs for each project.

<sup>&</sup>lt;sup>1</sup> See Draft and Final EIR/EA at http://www.mpwmd.net/wp-content/uploads/2015/08/MPWMD-Draft-EIR-EA-3-06.pdf and http://www.mpwmd.net/uploads/2015/08/FEIR\_8-21-06.pdf and Addendum No. 1 for the Phase 2 ASR facilities at: http://www.mpwmd.net/asd/board/board/board/packet/2012/20120416/16/item16.htm.

Mitigation Monitoring and Reporting Program for the Hilby Avenue Pump Station and Monterey Pipeline

Impacts	Mitigation Measures	Timing of Implementation	Implementation Responsibility <sup>2</sup>	Timing of Monitoring	Responsibility for Compliance Monitoring <sup>1</sup>
Impact AE-2: Construction Impacts due to Temporary Light and Glare	<b>Mitigation Measure AE-2</b> : <b>Minimize Construction Nighttime Lighting</b> . As part of its contract specifications, MRWPCA shall require its construction contractors to implement site-specific nighttime construction lighting measures for nighttime construction at the proposed Injection Well Facilities site and for the CalAm Distribution System: Alternative Monterey Pipeline. The measures shall, at a minimum, require that lighting be shielded, directed downward onto work areas to minimize light spillover, and specify that construction lighting use the minimum wattage necessary to provide safety at the construction sites. MRWPCA shall ensure these measures are implemented at all times during nighttime construction at the Injection Well Facilities site and for the CalAm Distribution System: Alternative Monterey Pipeline and for the duration of all required nighttime construction activity at these locations.	In contract specifications and during project construction	MRWPCA, CalAm, construction contractors	During project construction	MRWPCA and CalAm
Impact AQ-1: Construction Criteria Pollutant Emissions	<ul> <li>Mitigation Measure AQ-1: Construction Fugitive Dust Control Plan. The following standard Dust Control Measures shall be implemented during construction to help prevent potential nuisances to nearby receptors due to fugitive dust and to reduce contributions to exceedances of the state ambient air quality standards for PM<sub>10</sub>, in accordance with MBUAPCD's CEQA Guidelines.</li> <li>Water all active construction areas as required with non-potable sources to the extent feasible; frequency should be based on the type of operation, soil, and wind exposure and minimized to prevent wasteful use of water.</li> <li>Prohibit grading activities during periods of high wind (over 15 mph).</li> <li>Cover all trucks hauling soil, sand, and other loose materials and require trucks to maintain at least 2 feet of freeboard.</li> <li>Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites.</li> <li>Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.</li> <li>Enclose, cover, or water daily exposed stockpiles (dirt, sand, etc.).</li> <li>Replant vegetation in disturbed areas as quickly as possible.</li> <li>Wheel washers shall be installed and used by truck operators at the exits of the construction sites to the AWT Facility site, the Injection Well Facilities, and the Booster Pump Station.</li> <li>Post a publicly visible sign that specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the MBUAPCD ball also be visible to ensure compliance with MBUAPCD rules.</li> </ul>	During project construction	MRWPCA, CalAm project engineers and contractors	During project construction	MRWPCA, CalAm, and MBUAPCD
Impact BT-1: Construction Impacts to Special-Status Species and Habitat	<ul> <li>Mitigation Measure BT-1a: Implement Construction Best Management Practices. The following best management practices shall be implemented during all identified phases of construction (i.e., pre-, during, and post-) to reduce impacts to special-status plant and wildlife species:</li> <li>A qualified biologist must conduct an Employee Education Program for the construction crew prior to any construction activities. A qualified biologist must meet with the construction crew at the onset of construction at the site to educate the construction crew on the following: 1) the appropriate access route(s) in and out of the construction are and review project boundaries; 2) how a biological monitor will examine the area and agree upon a method which would ensure the safety of the monitor during such activities, 3) the special-status species that may be present; 4) the specific mitigation measures that will be incorporated into the construction of fort; 5) the general provisions and protections afforded by the USFWS and CDFW; and 6) the proper procedures if a special-status species is encountered within the site.</li> <li>Trees and vegetation not planned for removal or trimming shall be protected prior to and during construction to the maximum extent possible through the use of exclusionary fencing, such as hay bales for herbaceous and shrubby vegetation, and protective wood barriers for trees. Only certified weed-free straw shall be used, to avoid the introduction of non-native, invasive species. A biological monitor shall supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing remains intact.</li> <li>Protective fencing shall be placed prior to and during construction equipment and personnel from impacting vegetation outside of work limits. A biological monitor shall supervise the installation of protective fencing and monitor at least once per week until construction is complete to ensure that the protective fencing</li></ul>	Prior to, during and after project construction	MRWPCA, CalAm, construction contractors and qualified biologist	Prior to and during project construction	MRWPCA, CalAm, qualified biologist and construction biological monitor; City of Seaside for Injection Well Facilities

<sup>2</sup> CalAm Distribution System: Alternative Monterey Pipelines and the associated mitigation measures would be the responsibility of CalAm to implement and the local jurisdictions and/or the California Public Utilities Commission to monitor. CalAm Monterey Pipeline Mitigation Monitoring and Reporting Program

Impacts	Mitigation Measures	Timing of Implementation	Implementation Responsibility <sup>2</sup>	Timing of Monitoring	Responsibility for Compliance Monitoring <sup>1</sup>
	<ul> <li>during, and post-construction).</li> <li>No firearms shall be allowed on the construction sites at any time.</li> <li>All food-related and other trash shall be disposed of in closed containers and removed from the project area at least once a week during the construction period, or more often if trash is attracting avian or mammalian predators. Construction personnel shall not feed or otherwise attract wildlife to the area.</li> <li>To protect against spills and fluids leaking from equipment, the project proponent shall require that the construction contractor maintains an on-site spill plan and on-site spill containment measures that can be easily accessed.</li> <li>Refueling or maintaining vehicles and equipment should only occur within a specified staging area that is at least 100 feet from a waterbody (including riparian and wetland habitat) and that has sufficient management measures that will prevent fluids or other construction materials including water from being transported into waters of the state. Measures shall include confined concrete washout areas, straw wattles placed around stockpiled materials and plastic sheets to cover materials from becoming airborne or otherwise transported due to wind or rain into surface waters.</li> <li>The project proponent and/or its contractors shall coordinate with the City of Seaside on the location of Injection Well Facilities and the removal of sensitive biotic material.</li> </ul>				
	Mitigation Measure BT-1k: Conduct Pre-Construction Surveys for Protected Avian Species, including, but not limited to, white-tailed kite and California horned lark. Prior to the start of construction activities at each project component site, a qualified biologist shall conduct pre-construction surveys for suitable nesting habitat within the component Project Study Area and within a suitable buffer area from the component Project Study Area. The qualified biologist shall determine the suitable buffer area based on the avian species with the potential to nest at the site. In areas where nesting habitat is present within the component project area or within the determined suitable buffer area, construction activities that may directly (e.g., vegetation removal) or indirectly (e.g., noise/ground disturbance) affect protected nesting avian species shall be timed to avoid the breeding and nesting season. Specifically, vegetation and/or tree removal can be scheduled after September 16 and before January 31. Alternatively, a qualified biologist shall be the suitable buffer area i f construction commences between February 1 and September 15. Pre-construction surveys shall be conducted no more than 14 days prior to the suitable buffer area if construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). Because some bird species nest early in spring and others nest later in summer, surveys for nesting birds may be required to continue during construction to address new arrivals, and because some species breed multiple times in a season. The necessity and timing of these continued surveys shall be determined by the qualified biologist based on review of the final construction plans. If active raptor or other protected avian species nests are identified during the preconstruction activities or disturbance buffer shall be imposed within which no construction	Prior to project construction and if found establish and comply with no- disturbance buffer	MRWPCA, CalAm, construction contractors, and qualified biologists	Prior to project construction	MRWPCA, CalAm, qualified biologist(s), USFWS
Impact BT-1: Construction Impacts to Special-Status Species and Habitat (continued)	<b>Mitigation Measure BT-1m: Minimize Effects of Nighttime Construction Lighting.</b> Nighttime construction lighting shall be focused and downward directed to preclude night illumination of the adjacent open space area.	During project construction	MRWPCA and CalAm construction contractors	During project construction	MRWPCA, CalAm, City of Seaside, City of Monterey
Impact CR-1: Construction Impacts on Historic Resources	Mitigation Measure CR-1: Avoidance and Vibration Monitoring for Pipeline Installation in the Presidio of Monterey Historic District, and Downtown Monterey. Avoidance and Vibration Monitoring for Pipeline Installation in the Presidio of Monterey Historic District, and Downtown Monterey. (Applies to portion of the CalAm Distribution System: Alternative Monterey Pipeline) CalAm shall construct the section of the Alternative Monterey Pipeline located on Stillwell Avenue within the Presidio of Monterey Historic District, adjacent to the Spanish Royal Presidio, and within the Monterey Old Town National Historic Landmark District (including adjacent to Stokes Adobe, the Gabriel de la Torre Adobe, the Fremont Adobe, Colton Hall, and Friendly Plaza in downtown Monterey) <sup>3</sup> as close as possible to the centerlines of these streets to: (1) avoid direct impacts to the historic Presidio Entrance Monument, and (2) reduce impacts from construction vibration	During project construction	CalAm, project engineers, construction contractors	During project construction	CalAm and City of Monterey

<sup>&</sup>lt;sup>3</sup> A modification to this mitigation measure has been made to clarify its applicability to the Staff-Recommendation Alternative of the GWR Project. Specifically, the text highlighted in gray has been added and the following text deleted: "and within W. Franklin Street in downtown Monterey." This change to the mitigation measure does not constitute significant new information; it merely clarifies the mitigation for the selected alternative. Mitigation Monitoring and Reporting Program

Impacts	Mitigation Measures	Timing of Implementation	Implementation Responsibility <sup>2</sup>	Timing of Monitoring	Responsibility for Compliance Monitoring <sup>1</sup>
	to below the 0.12 inches per second (in/sec) peak particle velocity vibration PPV) threshold. If CalAm determines that the pipeline cannot be located near the centerline of these street segments due to traffic concerns or existing utilities, the historic properties identified on Table 4.6-2 of the GWR Project Draft EIR (MRWPCA/DD&A, April 2015) shall be monitored for vibration during pipeline construction, especially during the use of jackhammers and vibratory rollers. If construction vibration levels exceed 0.12 in/sec PPV, construction shall be halted and other construction methods shall be employed to reduce the vibration levels below the standard threshold. Alternative construction methods may include using concrete saws instead of jackhammers or hoe-rams to open excavation trenches, the use of non-vibratory rollers, and hand excavation. If impact sheet pile installation is needed (i.e., for horizontal directional drilling or jack-and-bore) within 80 feet of any historical resource or within 80 feet of a historic district, CalAm shall monitor vibration levels to ensure that the 0.12-in/sec PPV damage threshold is not exceeded. If vibration levels exceed the applicable threshold, the contractor shall use alternative construction methods such as vibratory pile drivers.				
Impact CR-2: Construction Impacts on Archaeological Resources or Human Remains	<ul> <li>Mitigation Measure CR-2a: Archaeological Monitoring Plan. Each of the project proponents shall contract a qualified archaeologist meeting the Secretary of the Interior's Qualification Standard (Lead Archaeologist) to prepare and implement an Archaeological Monitoring Plan, and oversee and direct all archaeological monitoring shall contract to rall subsurface excavation work within 100 feet of Presidio 2 in the Presidio of Monterey, and within the arcas of known archaeologically sensitive sites in Monterey<sup>1</sup>. At a minimum, the Archaeological Monitoring Plan shall:</li> <li>Detail the cultural resources training program that shall be completed by all construction and field workers involved in ground disturbance;</li> <li>Designate the person(s) responsible for conducting monitoring activities, including Native American monitor(s), if deemed necessary;</li> <li>Establish monitoring protocols to ensure monitoring is conducted in accordance with current professional standards provided by the California Office of Historic Preservation;</li> <li>Establish a schedule for submittal of monitoring reports;</li> <li>Establish protocols for notifications in case of encountering cultural resources, as well as methods for evaluating significance, developing and implementing a plan to avoid or mitigate significant resources sites;</li> <li>Establish protocols for notifying the County, Native Americans, and local authorities (i.e. Sheriff, Police) should site looting and other illegal activities occur during construction with reference to Public Resources Code (997.99.</li> <li>During the course of the monitoring, the Lead Archaeologist Many adjust the frequency – from continuous to intermittent – of the monitoring activities within 100 feet of the findings of this assessment to the lead apertop. Circle proponent of the encountered archaeological activities occur during construction with reference to Public Resources a defined by Public Resources Code 21083.2 are encountered, all soli disturbing activities within 100</li></ul>	Prior to and during project construction	MRWPCA (for Lake El Estero Diversion only), CalAm, qualified archaeologist	During project construction	MRWPCA, CalAm, qualified archaeologist

<sup>&</sup>lt;sup>4</sup> A modification to this mitigation measure has been made to clarify its applicability to the Staff-Recommendation Alternative of the GWR Project. Specifically, the text highlighted in gray has been added and the following text deleted: "in downtown Monterey on W. Franklin Street between High and Figuero Streets, and at potentially sensitive archaeological sites at Lake El Estero"

CalAm Monterey Pipeline

Impacts	Mitigation Measures	Timing of Implementation	Implementation Responsibility <sup>2</sup>	Timing of Monitoring	Responsibility for Compliance Monitoring <sup>1</sup>
	<b>Mitigation Measure CR-2b</b> : <b>Discovery of Archaeological Resources or Human Remains.</b> If archaeological resources or human remains are unexpectedly discovered during any construction, work shall be halted within 50 meters (±160 feet) of the find until it can be evaluated by a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented. The County Coroner shall be notified in accordance with provisions of Public Resources Code 5097.98-99 in the event human remains are found and the Native American Heritage Commission shall be notified in accordance with the provisions of Public Resources Code section 5097 if the remains are determined to be of Native American origin.	During project construction	MRWPCA, CalAm, and qualified archaeologists	During project construction	MRWPCA, CalAm, and qualified archaeologist
	<b>Mitigation Measure CR-2c</b> : <b>Native American Notification.</b> Because of their continuing interest in potential discoveries during construction, all listed Native American Contacts shall be notified of any and all discoveries of archaeological resources in the project area.	During project construction	MRWCPA, CalAm and qualified archaeologist	During project construction	MRWCPA, CalAm and qualified archaeologist
Impact EN-1: Construction Impacts due to Temporary Energy Use	<b>Mitigation Measure EN-1: Construction Equipment Efficiency Plan.</b> MRWPCA (for all components except the CalAm Distribution System) or CalAm (for the CalAm Distribution System) shall contract a qualified professional (i.e., construction planner/energy efficiency expert) to prepare a Construction Equipment Efficiency Plan that identifies the specific measures that MRWPCA or CalAm (and its construction contractors) will implement as part of project construction to increase the efficient use of construction equipment. Such measures shall include, but not necessarily be limited to: procedures to ensure that all construction equipment is properly tuned and maintained at all times; a commitment to utilize existing electricity sources where feasible rather than portable diesel-powered generators; consistent compliance with idling restrictions of the state; and identification of procedures (including the use of routing plans for haul trips) that will be followed to ensure that all materials and debris hauling is conducted in a fuel-efficient manner.	Prior to project construction	MRWPCA, CalAm. energy efficiency expert, construction contractors	During project construction	MRWPCA and CalAm
Impact HH-2: Accidental Release of Hazardous Materials During Construction	<b>Mitigation Measure HH-2a</b> : Environmental Site Assessment. If required by local jurisdictions and property owners with approval responsibility for construction of each component, MRWPCA and CalAm shall conduct a Phase I Environmental Site Assessment in conformance with ASTM Standard 1527-05 to identify potential locations where hazardous material contamination may be encountered. If an Environmental Site Assessment indicates that a release of hazardous materials could have affected soil or groundwater quality at a project site, a Phase II environmental site assessment shall be conducted to determine the extent of contamination and to prescribe an appropriate course of remediation, including but not limited to removal of contaminated soils, in conformance with state and local guidelines and regulations. If the results of the subsurface investigation(s) indicate the presence of hazardous materials, additional site remediation may be required by the applicable state or local regulatory agencies, and the contractors shall be required to comply with all regulatory requirements for facility design or site remediation.	Prior to project construction (if presence of hazardous materials is identified, site remediation or design changes may be required)	MRWPCA and CalAm project engineers, construction contractors	Only needed until owner/contra ctor deems each construction site is deemed safe for required construction	MRWPCA and CalAm
	<ul> <li>Mitigation Measure HH-2b: Health and Safety Plan. The construction contractor(s) shall prepare and implement a project-specific Health and Safety Plan (HSP) for each site on which construction may occur, in accordance with 29 CFR 1910 to protect construction workers and the public during all excavation, grading, and construction. The HSP shall include the following, at a minimum:</li> <li>A summary of all potential risks to construction workers and the maximum exposure limits for all known and reasonably foreseeable site chemicals (the HSP shall incorporate and consider the information in all available existing Environmental Site Assessments and remediation reports for properties within ¼-mile using the EnviroStor Database);</li> <li>Specified personal protective equipment and decontamination procedures, if needed;</li> <li>Emergency procedures, including route to the nearest hospital;</li> <li>Procedures to be followed in the event that evidence of potential soil or groundwater contamination (such as soil staining, noxious odors, debris or buried storage containers) is encountered. These procedures shall be in accordance with hazardous waste operations regulations and specifically include, but are not limited to, the following: immediately stopping work in the vicinity of the unknown hazardous materials release, notifying Monterey County Department of Environmental Health, and retaining a qualified environmental firm to perform sampling and remediation; and The identification and responsibilities of a site health and safety supervisor.</li> </ul>	Prior to project construction	Construction contactors	During project construction	MRWPCA, CalAm, Monterey County Dept. of Environmental Health
	<b>Mitigation Measure HH-2c</b> : <b>Materials and Dewatering Disposal Plan.</b> MRWPCA and CalAm and/or their contractors shall develop a materials disposal plan specifying how the contractor will remove, handle, transport, and dispose of all excavated material in a safe, appropriate, and lawful manner. The plan must identify the disposal method for soil and the approved disposal site, and include written documentation that the disposal site will accept the waste. For areas within the	Prior to and during project construction	MRWPCA, CalAm, construction	During project construction	MRWPCA and CalAm; FORA and the City of

Impacts	Mitigation Measures	Timing of Implementation	Implementation Responsibility <sup>2</sup>	Timing of Monitoring	Responsibility for Compliance Monitoring <sup>1</sup>
	Seaside munitions response areas called Site 39 (coincident with the Injection Well Facilities component), the materials disposal plans shall be reviewed and approved by FORA and the City of Seaside. The contractor shall develop a groundwater dewatering control and disposal plan specifying how the contractor will remove, handle, and dispose of groundwater impacted by hazardous substances in a safe, appropriate, and lawful manner. The plan must identify the locations at which potential contaminated groundwater dewatering are likely to be encountered (if any), the method to analyze groundwater for hazardous materials, and the appropriate treatment and/or disposal methods. If the dewatering effluent contains contaminants that exceed the requirements of the General WDRs for Discharges with a Low Threat to Water Quality (Order No. R3-2011-0223, NPDES Permit No. CAG993001), the construction contractor shall contain the dewatering effluent in a portable holding tank for appropriate offsite disposal or discharge. The contractor can either dispose of the contaminated effluent at a permitted waste management facility or discharge the effluent, under permit, to the Regional Treatment Plant.		contractors		Seaside for areas within Site 39
Impact LU-2: Operational Consistency with Plans, Policies, and Regulations	See the following mitigation measures: AQ-1, BF-1a, BF-1b, BF-1c, BF-2a or Alternate BF-2a, BT-1a through BT-1q, BT-2a through BT-2c, CR-2a through CR-2c, EN-1, NV-1a through NV-1d, NV-2a, NV-2b, PS-3, TR-2, TR-3, and TR-4.	See other rows for specific timing of each mitigation measure	See other lines for responsibilities for each mitigation measure	See other rows for specific timing of each mitigation measure	See other rows for responsibilities for each mitigation measure
Impact NV-1: Construction Noise	<b>Mitigation Measure NV-1b</b> : <b>Monterey Pipeline Noise Control Plan for Nighttime Pipeline Construction.</b> CalAm shall submit a Noise Control Plan for all nighttime pipeline work to the California Public Utilities Commission for review and approval prior to the commencement of project construction activities. The Noise Control Plan shall identify all feasible noise control procedures to be implemented during nighttime pipeline installation in order to reduce noise levels to the extent practicable at the nearest residential or noise sensitive receptor. At a minimum, the Noise Control Plan shall require use of moveable noise screens, noise blankets, or other suitable sound attenuation devices be used to reduce noise levels during nighttime pipeline installation activities.	Prior to project construction	CalAm	During project construction	CalAm, CPUC and City of Monterey
	<b>Mitigation Measure NV-1c</b> : <b>Neighborhood Notice</b> . Residences and other sensitive receptors within 900 feet of a nighttime construction area shall be notified of the construction location and schedule in writing, at least two weeks prior to the commencement of construction activities. The notice shall also be posted along the proposed pipeline alignments, near the proposed facility sites, and at nearby recreational facilities. The contractor shall designate a noise disturbance coordinator who would be responsible for responding to complaints regarding construction noise. The coordinator shall determine the cause of the complaint and ensure that reasonable measures are implemented to correct the problem. A contact number for the noise disturbance coordinator shall be conspicuously placed on construction site fences and included in the construction schedule notification sent to nearby residences. The notice to be distributed to residences and sensitive receptors shall first be submitted, for review and approval, to the MRWPCA and city and county staff as may be required by local regulations.	Prior to project construction	MRWPCA, CalAm, construction contractor, noise disturbance coordinator	Prior to project construction	MRWPCA and CalAm
Impact PS-3: Construction Solid Waste Policies and Regulations	<b>Mitigation Measure PS-3: Construction Waste Reduction and Recycling Plan</b> . The construction contractor(s) shall prepare and implement a construction waste reduction and recycling plan identifying the types of construction debris the Project will generate and the manner in which those waste streams will be handled. In accordance with the California Integrated Waste Management Act of 1989, the plan shall emphasize source reduction measures, followed by recycling and composting methods, to ensure that construction and demolition waste generated by the project is managed consistent with applicable statutes and regulations. In accordance with the California Green Building Standards Code and local regulations, the plan shall specify that all trees, stumps, rocks, and associated vegetation and soils, and 50% of all other nonhazardous construction and demolition waste, be diverted from landfill disposal. The plan shall be prepared in coordination with the Monterey Regional Waste Management District and be consistent with Monterey County's Integrated Waste Management Plan. Upon project completion, MRWPCA and CalAm shall collect the receipts from the contractor(s) to document that the waste reduction, recycling, and diversion goals have been met.	Prior to, during, and after project construction	MRWPCA and CalAm construction contractors	Upon project completion	MRWPCA and CalAm
Impact TR-2: Construction- Related Traffic Delays, Safety and Access Limitations	<b>Mitigation Measure TR-2</b> : <b>Traffic Control and Safety Assurance Plan.</b> Prior to construction, MRWPCA and/or its contractor shall prepare and implement a traffic control plan or plans for the roadways and intersections affected by MRWPCA construction (Product Water Conveyance Pipeline) and CalAm shall prepare and implement a traffic control plan for the roadways and intersections affected by the CalAm Distribution System Improvements (Transfer and Monterey pipelines). The traffic control plan(s) shall comply with the affected jurisdiction's encroachment permit requirements and will be based on detailed design plans. For all project construction activities that could affect the public right-of-way (e.g., roadways, sidewalks, and walkways), the plan shall include measures that would provide for continuity of vehicular, pedestrian, and bicyclist access; reduce the potential for traffic accidents; and ensure worker safety in construction zones. Where project construction activities could disrupt mobility and access for bicyclists and pedestrians, the plan shall include measures to ensure safe and convenient access would	Prior to project construction	MRWPCA and CalAm construction contractor	During project construction	MRWPCA, CalAm, and local jurisdictions

Impacts	Mitigation Measures	Timing of Implementation	Implementation Responsibility <sup>2</sup>	Timing of Monitoring	Responsibility for Compliance Monitoring <sup>1</sup>
	be maintained. The traffic control and safety assurance plan shall be developed on the basis of detailed design plans for the approved project. The plan shall include, but not necessarily be limited to, the elements listed below: <i>General</i> a. Develop circulation and detour plans to minimize impacts on local streets. As necessary, signage and/or flaggers shall be used to guide vehicles to detour routes and/or through the construction work areas. b. Implement a public information program to notify motorists, bicyclists, nearby residents, and adjacent businesses of the impending construction activities (e.g., media coverage, email notices, websits, e.c.). Notices of the location(s) and timing of lane closures shall be published in local newspapers and on available websites to allow motorists to select alternative routes. <i>Routeaus</i> c. Haul routes that minimize track traffic on local roadways and residential streets shall be used to the extent feasible. d. Schedule truck trips outside of peak morning and evening commute hours to minimize adverse impacts on traffic flow. e. Limit lane closures during peak hours. Travel lane closures, when necessary, shall be managed such that one travel lane is kept open at all times to allow alternating traffic flow in both directions along affected two-lane roadways. In the City of Marina, one-way traffic shall be limited to a maximum of 5 minutes of traffic dalay. f. <i>Esstore</i> roads and streets to normal operation by covering trenches with steel plates outside of normal work hours or when work is not in progress. g. Comply with roadside safety protocols to reduce the risk of accidents. Provide "Road Work Ahead" warning signs and speed control (including signs informing drivers of state legislated duble fines for speed infractions in a construction zone to achieve required speed reductions for safe traffic flow through the work zone. Train construction personnel to apply appropriate safety measures as described in the plan. h. Provide flaggers in school arcsa st treet crossings to				
Impact TR-3: Construction- Related Roadway Deterioration	Distribution System Improvements) and CalAm (for CalAm Distribution System Improvements) shall detail the preconstruction condition of all local construction access and haul routes proposed for substantial use by project-related construction vehicles. The construction routes surveyed must be consistent with those identified in the construction traffic control and safety assurance plan developed under Mitigation Measure TR-2. After construction is completed, the same roads shall be surveyed again to determine whether excessive wear and tear or construction damage has occurred. Roads damaged by project-related construction vehicles shall be repaired to a structural condition equal to, or greater than, that which existed prior to construction activities. In the City of Marina, the construction in the city rights-way must comply with the City's design standards, including restoration of the streets from curb to curb, as applicable. In the City of Monterey, asphalt pavement of full travel lanes will be resurfaced without seams along wheel or bike paths.	Prior to project construction, after project construction	MRWPCA and CalAm construction contractors	After project construction	MRWPCA, CalAm, and local jurisdictions

Impacts	Mitigation Measures	Timing of Implementation	Implementation Responsibility <sup>2</sup>	Timing of Monitoring	Responsibility for Compliance Monitoring <sup>1</sup>
Impact TR-4: Construction Parking Interference	<b>Mitigation Measure TR-4: Construction Parking Requirements</b> . Prior to commencing project construction, the construction contractor(s) shall coordinate with the potentially affected jurisdictions to identify designated worker parking areas that would avoid or minimize parking displacement in congested areas of Marina, Seaside, and downtown Monterey. The contractors shall provide transport between the designated parking location and the construction work areas. The construction contractor(s) shall also provide incentives for workers that carpool or take public transportation to the construction work areas. The engineering and construction design plans shall specify that contractors limit time of construction within travel lanes and public parking spaces and provide information to the public about locations of alternative spaces to reduce parking disruptions.	Prior to project construction	MRWPCA and CalAm construction contractor	During project construction	MRWPCA City of Marina, City of Seaside, City of Monterey