

APPENDIX C

Mitigation Monitoring and Reporting Program

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SECTION 5

Mitigation Monitoring and Reporting Program

The Mitigation Monitoring and Reporting Program (MMRP) for the San Jacinto Valley Raw Water Conveyance Facilities Project (Project) has been prepared in accordance with Public Resources Code Section 21081.6 and State CEQA Guidelines Section 15091(s). Eastern Municipal Water District (EMWD) will use this MMRP to track compliance with the Project mitigation measures. EMWD will consider the MMRP during the certification hearing for the Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND). The MMRP incorporates all mitigation measures adopted for the proposed Project.

This MMRP summarizes potentially significant impacts and mitigation commitments identified in the Project IS/MND. **Table 5-1** provides the MMRP which includes all mitigation measures, monitoring process, monitoring timing, and responsible agency/entity for implementation. Impacts and mitigation measures are presented in the same order as in the IS/MND. The columns in the table provide the following information:

- **Mitigation Measures:** The action(s) that will be taken to reduce the impact to a less than significant level.
- **Monitoring Process:** This column outlines the appropriate steps to implement and verify compliance with the mitigation measures.
- **Monitoring Timing:** This column indicates the general schedule for conducting each monitoring task, either prior to reconstruction, during construction, and/or after construction.
- **Responsible Agency/Entity:** This column lists the agency/entity responsible for ensuring implementation of the mitigation measure.

**TABLE 5-1
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE SAN JACINTO VALLEY RAW WATER CONVEYANCE FACILITIES PROJECT**

Mitigation Measure	Monitoring / Reporting Action	Monitoring Timing	Responsible Person(s)
Aesthetics			
AES-1: Design of Aboveground Structures: EMWD shall ensure that the design of all aboveground structures (the flow control facility, chlorination treatment facility, and appurtenant facilities associated with the pipeline) shall be consistent with the general building style of the existing site and surroundings to ensure compatibility with visual character of the immediate neighborhood while accommodating necessary infrastructure.	<ul style="list-style-type: none"> • Include mitigation measure in design specifications • Retain a copy of design specifications in project file 	<ul style="list-style-type: none"> • Prior to Construction 	<ul style="list-style-type: none"> • EMWD • Design Contractor
AES-2: Lighting. All nighttime construction lighting and temporary or permanent lighting installed on new facilities shall be attached to motion sensors and shielded and directed downward to avoid light spillage onto neighboring properties.	<ul style="list-style-type: none"> • Include mitigation measure in design specifications and construction contractor specifications • Retain a copy of design specifications and construction monitoring report in project file 	<ul style="list-style-type: none"> • Prior to Construction • During Construction 	<ul style="list-style-type: none"> • EMWD • Design Contractor • Construction Contractor
Air Quality			
AQ-1: Tier 4 Rated Engines. EMWD shall require the construction contractor to use off-road equipment that meets the EPA certified Tier 4 final engines or engines that are certified to meet or exceed the emission ratings for EPA Tier 4 final or interim engines for all construction equipment and vehicles used for the Project.	<ul style="list-style-type: none"> • Include mitigation measure in construction contracting specification • Conduct periodic monitoring of mitigation commitments during construction. • Retain construction monitoring report in project file. 	<ul style="list-style-type: none"> • During Construction 	<ul style="list-style-type: none"> • EMWD • Construction Contractor
AQ-2: Construction Schedule Adjustment. During the mass grading and excavation phase associated with construction of the EM-25 service connection, flow control facility, and chlorination treatment facility (estimated as two weeks of the total construction schedule), construction of the pipeline shall not occur along Esplanade Avenue west of Cawston Avenue North. This minimizes exposure of sensitive residential receptors along Esplanade Avenue to PM10 and PM2.5 emissions from the combination of these activities.	<ul style="list-style-type: none"> • Include mitigation measure in construction contracting specification • Conduct periodic monitoring of mitigation commitments during the mass grading and excavation phase of construction • Retain construction monitoring report in project file 	<ul style="list-style-type: none"> • During Construction (Specifically the mass grading and excavation phase) 	<ul style="list-style-type: none"> • EMWD • Construction Contractor
Biological Resources			
BIO-1: Focused Burrowing Owl Surveys. Focused protocol surveys for burrowing owl shall be conducted prior to construction of the EM-25 service connection, flow control facility, chlorination treatment facility, pipelines to be installed in bare undisturbed ground, and all	<ul style="list-style-type: none"> • Include mitigation measure in construction contracting specification 	<ul style="list-style-type: none"> • Prior to Construction (Survey) 	<ul style="list-style-type: none"> • EMWD • Construction Contractor

<p>staging areas used for the Project. The focused protocol surveys shall be conducted by a knowledgeable biologist following protocol outlined in the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012). If burrowing owl is observed during the focused surveys and found to be potentially impacted by the Proposed Project, additional avoidance and mitigation measures will be required. Avoidance measures include constructing Proposed Project facilities outside the breeding season, establishing a suitable buffer around an active burrow, restricting activities around certain times of year, and excluding and relocating owls. A Burrow Exclusion Plan approved by CDFW will be required to implement exclusion and relocation. Permanent impacts to land that previously contained burrowing owls may also require conservation of mitigation lands to offset the impact to burrowing owl and its habitat. The conservation of mitigation lands will be determined through consultation with CDFW.</p>	<ul style="list-style-type: none"> Retain a knowledgeable biologist to conduct focused protocol survey for burrowing owl Retain copies of all surveys and reports in project file If burrowing owl is observed, implement avoidance measures, document effort, and consult with CDFW, as applicable 	<ul style="list-style-type: none"> During Construction (Avoidance measures, as needed)
<p>BIO-2: Preconstruction Surveys. EMWD shall conduct pre-construction surveys for coastal whiptail to determine if this species is present within the areas to be used for the EM-25 service connection, flow control facility, chlorination treatment facility, pipelines to be installed in bare undisturbed ground, and all staging areas used for the Project. If this species is present, construction best management practices (BMPs) and Worker Environmental Awareness Program (WEAP) training shall be implemented during construction activities to avoid and minimize potential impacts to these species. Example BMPs to be implemented during construction include limiting vehicle speed onsite to 15 miles per hour, covering trenches and open pits, if trenches are left open adding wooden ramps in the trench to allow small mammals to escape, temporarily fencing work areas using silt fencing, and cleaning up all trash and debris daily. Additional avoidance measures may include establishing a buffer around the species an onsite monitoring should a population of a special-status species be found. Additionally, the WEAP training will be conducted by a knowledgeable biologist to identify species that could be impacted and summarize the construction BMPs to be implemented. Construction personnel will be instructed to not directly harm any special-status species onsite by halting activities until the species can move to offsite areas or contact a qualified biologist to move the species out of harm's way.</p>	<ul style="list-style-type: none"> Include mitigation measure in construction contracting specification Retain a qualified biologist to conduct survey for coastal whiptail If for coastal whiptail is observed, conduct construction BMPs and WEAP training Retain copies of all surveys and reports in project file 	<ul style="list-style-type: none"> Prior to Construction (Survey) During Construction (BMPs and WEAP, as needed)
<p>BIO-3: Nesting Birds. Construction of the Proposed Project shall avoid the general avian nesting season of February through August. If construction of Proposed Project facilities that contain or are immediately adjacent to suitable nesting habitat must occur during the general avian nesting season, a pre-construction clearance survey should be conducted within 10 days prior to the start of construction activities to determine if any active nests or nesting activity is</p>	<ul style="list-style-type: none"> Include mitigation measure in construction contracting specification If construction occurs between February and August, retain a qualified biologist to conduct nesting bird survey, and establish appropriate buffer if necessary 	<ul style="list-style-type: none"> Prior to Construction During Construction

occurring on or within 500 feet of the Proposed Project. If no sign of nesting activity is observed, construction may proceed without potential impacts to nesting birds.

- Conduct periodic construction monitoring, as necessary
- Retain copies of all surveys and reports in project file

If an active nest is observed during the pre-construction clearance survey, an adequate buffer should be established around the active nest depending on sensitivity of the species and proximity to Proposed Project impact areas. Typical buffer distances include up to 300-feet for passerines and up to 500-feet for raptors, but can be reduced as deemed appropriate by a monitoring biologist. Onsite construction monitoring may also be required to ensure that no direct or indirect impacts occur to the active nest. Proposed Project activities may encroach into the buffer only at the discretion of the monitoring biologist. The buffer should remain in place until the nest is no longer active as determined by the monitoring biologist.

Cultural Resources

CUL-1: Retention of Qualified Archaeologist. Prior to the start of any ground disturbing activities, a qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior 2008) shall be retained by EMWD to carry out all mitigation measures related to cultural resources.

CUL-2: Cultural Resources Sensitivity Training. Prior to start of any ground-disturbing activities, the qualified archaeologist shall conduct cultural resources sensitivity training for all construction personnel associated with the Project. Construction personnel shall be informed of the types of cultural resources that may be encountered during construction, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. EMWD shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance

CUL-3: Construction Monitoring. An archaeological monitor (working under the direct supervision of the qualified archaeologist) and a Native American monitor shall observe all ground-disturbing activities, including but not limited to brush clearance, vegetation removal, grubbing, grading, and excavation. The qualified archaeologist, in coordination with EMWD and the Native American monitor(s), may reduce or discontinue monitoring if it is determined that the possibility of encountering buried archaeological deposits is low based on observations of soil stratigraphy or other factors. Archaeological monitoring shall be conducted by an archaeologist familiar with the types of archaeological resources that could be encountered within the Project area. The Native American monitor

- Retain a qualified archaeologist to carry out all mitigation measures
- Prior to Construction
- EMWD

- Retain a qualified archaeologist to conduct cultural resources sensitivity training for all construction personnel
- Prior to Construction
- EMWD

- Retain documentation demonstrating the attendance of all construction personnel in training
- Construction Contractor

- Include mitigation measure in construction contracting specification
- Retain an archaeological and Native American monitors to conduct monitoring of all ground disturbance
- Require daily logs and a final monitoring report, that shall be submitted to EMWD, Native American groups, and EIC.
- During Construction
- EMWD
- Construction Contractor

shall be from a tribe that is culturally and geographically affiliated with the Project area (according to the California Native American Heritage Commission's contact list for this Project). The archaeological and Native American monitor(s) shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment (as prescribed in CUL-4). The archaeological monitor shall keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring has been completed, the qualified archaeologist shall prepare a monitoring report that details the results of monitoring. The report shall be submitted to EMWD and any Native American groups who request a copy. The qualified archaeologist shall submit a copy of the final report to the California Historic Resources Information System (CHRIS) Eastern Information Center (EIC).

CUL-4: Unanticipated Discoveries. In the event of the unanticipated discovery of archaeological materials, all work shall immediately cease in the area (within approximately 100 feet) of the discovery until it can be evaluated by the qualified archaeologist. Construction shall not resume until the qualified archaeologist has conferred with EMWD, and the appropriate Native American representatives for prehistoric resources, on the significance of the resource.

If it is determined that the discovered archaeological resource constitutes a historical resource or a unique archaeological resource under CEQA, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, an Archaeological Resources Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with EMWD that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource. The qualified archaeologist and EMWD shall consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond those that are scientifically important, are considered.

CUL-5: Artifact Disposition. Prior to the start of Project construction, EMWD shall execute an agreement with the Soboba Band of Luiseño Indians regarding the final disposition and reburial of inadvertently discovered prehistoric/Native American artifacts that are culturally relevant to the tribe. The agreement shall identify a mutually acceptable location in the vicinity of the Project area on EMWD-owned

- Include mitigation measure in construction contracting specification
- Retain a qualified archaeologist to coordinate with EMWD and Native American representatives on developing an appropriate treatment plan for discovered resources, if any
- If found, document and retain records regarding discovery of archaeological resources

- During Construction
- EMWD
- Construction Contractor

- Include mitigation measure in construction contracting specification
- Execute Agreement with Soboba Band of Luiseño Indians regarding location of reburied prehistoric artifacts

- Prior to Construction
- EMWD
- During Construction
- Construction Contractor

land where these types of artifacts will be reburied in perpetuity. The location shall be kept confidential and shall not be subject to further disturbance and filed with the California Native American Heritage Commission's Sacred Lands File. The agreement shall only be applicable to prehistoric artifacts and/or features that are not associated with inhumations and/or grave goods, the treatment of which is subject to California State law as prescribed in Mitigation Measure CUL-6. Prior to reburial, the treatment and reporting of significant discoveries shall be conducted in accordance with Mitigation Measure CUL-3, which will document the location of the discoveries as well as their reburial location in the monitoring report which will be filed with the Eastern Information Center. Prior to the reburial of the inadvertent discoveries, the qualified archaeologist shall be allowed an adequate amount of time to collect the scientifically consequential information associated with the discoveries prior to their reburial.

- Retain agreement and all artifact disposition reports in project file, and submit to the EIC

CUL-6: Human Remains. If human skeletal remains are uncovered during implementation of the Project, EMWD shall immediately halt work and contact the Riverside County coroner to determine whether the remains are human. If the County Coroner determines that the remains are Native American, they shall contact the NAHC, as required by law. The NAHC shall then identify the person(s) thought to be the Most Likely Descendant (MLD) of the deceased Native American, who will then help determine what course of action should be taken in dealing with the remains. EMWD shall ensure that the immediate vicinity where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the MLD regarding their recommendations.

- Include mitigation measure in construction contracting specification
- If human remains are found, coordinate with Riverside County Coroner, and contact the NAHC if applicable
- NAHC shall notify MLD, if applicable
- Document and retain records regarding discovery of skeletal remains in project file

- During Construction
- EMWD
- Construction Contractor

Geology, Soils, and Seismicity

GEO-1: Soils Reports and Geotechnical Investigation. A soils report and geotechnical investigation report shall be prepared by a California licensed geotechnical engineer for the Project facilities with potential to encounter shallow groundwater or expansive soils. These reports shall evaluate various geotechnical characteristics including existing liquefaction risk, expansive soils, and soil stability, and whether the operation of Project facilities would exacerbate an existing risk of liquefaction or soil instability or create a new risk. The reports and evaluation shall provide recommendations for Project design per these findings and recommendations shall be incorporated into facility design.

- Include mitigation measure in design specifications
- Retain a copy of Geotechnical Investigation report, recommendations, and design specifications in project file

- Prior to Construction
- EMWD
- Design Contractor

<p>GEO-2: Paleontological Monitoring. Prior to the start of earth moving activities, EMWD shall retain a Qualified Paleontologist defined as one meeting SVP standards (Society for Vertebrate Paleontology 2010) to attend any pre-grade construction meetings to determine when and where excavations will occur below a depth of 3 feet below the existing ground surface. Working with EMWD and the construction crew, the Qualified Paleontologist shall determine a paleontological monitoring schedule.</p> <p>The Qualified Paleontologist, or a paleontological monitor working under the direct supervision of the Qualified Paleontologist, shall monitor all ground-disturbing activity below a depth of 3 feet below the existing ground surface. The location, duration, and timing of monitoring shall be determined by the Qualified Paleontologist designated for the Project in consultation with the EMWD and shall be based on a review of geologic maps and grading plans. During the course of monitoring, if the Qualified Paleontologist can demonstrate based on observations of subsurface conditions that the level of monitoring should be reduced, increased, or discontinued, the paleontologist, in consultation with EMWD may adjust the level of monitoring, as warranted.</p>	<ul style="list-style-type: none"> • Include mitigation measure in construction contractor specification • Retain a Qualified Paleontologist to coordinate with EMWD and construction contractor to develop location and schedule for monitoring • Retain a Qualified Paleontologist to conduct monitoring during construction • Retain construction monitoring reports in the project file 	<ul style="list-style-type: none"> • Prior to Construction • During Construction 	<ul style="list-style-type: none"> • EMWD • Construction Contractor
<p>GEO-3: Paleontological Sensitivity Training. Prior to start of earth moving activities, the Qualified Paleontologist shall conduct pre-construction worker paleontological resources sensitivity training. This training shall include information on what types of paleontological resources could be encountered during excavations, what to do in case an unanticipated discovery is made by a worker, and laws protecting paleontological resources. All construction personnel shall be informed of the possibility of encountering fossils and instructed to immediately inform the construction foreman or supervisor if any bones or other potential fossils are unexpectedly unearthed in an area where a paleontological monitor is not present.</p>	<ul style="list-style-type: none"> • Include mitigation measure in construction contractor specification • Retain a Qualified Paleontologist to conduct paleontological sensitivity training for all construction personnel 	<ul style="list-style-type: none"> • Prior to Construction 	<ul style="list-style-type: none"> • EMWD • Construction Contractor
<p>GEO-4: Unanticipated Paleontological Discovery. In the event of unanticipated discovery of paleontological resources when a paleontological monitor is not present, the contractor shall cease ground-disturbing activities within 50 feet of the find until it can be assessed by the Qualified Paleontologist. The Qualified Paleontologist shall assess the find, implement recovery and reporting measures, if necessary, and determine if paleontological monitoring is warranted once work resumes.</p>	<ul style="list-style-type: none"> • Include mitigation measure in construction contracting specification • Qualified Paleontologist to assess the find, implement recovery and reporting measures • Retain construction monitoring report in project file 	<ul style="list-style-type: none"> • During Construction 	<ul style="list-style-type: none"> • EMWD • Construction Contractor

Hazards and Hazardous Materials			
<p>Implementation of Mitigation Measure TRAF-1 is required (see below).</p>	<ul style="list-style-type: none"> • Include mitigation measure in construction contracting specification • Provide written notice at least two weeks prior to the start of construction to owners/occupants along portions of Esplanade Avenue, Sanderson Avenue, and Commonwealth Avenue to be affected during construction • Conduct periodic monitoring of Traffic Control Plan requirements during construction, including notification to owners/occupants affected by road closures • Retain copy of Traffic Control Plan in project file 	<ul style="list-style-type: none"> • Prior to Construction • During Construction 	<ul style="list-style-type: none"> • EMWD • Construction Contractor

Noise			
<p>NOISE-1: Noise Barriers. EMWD shall require the construction contractor to provide temporary fences and noise barriers to block the line-of-sight between the construction equipment and the noise-sensitive receptor when the use of heavy equipment is prevalent for construction occurring in the City of San Jacinto outside of the allowable hours specified in the City of San Jacinto Municipal Code Section 8.40.090 and for construction occurring in the City of Hemet outside of the allowable hours specified in the City of Hemet Municipal Code Section 67-10. Building plans shall include documentation prepared by a noise consultant verifying compliance with this measure.</p> <ul style="list-style-type: none"> • Provide a 15-foot-tall construction fence equipped with noise reduction materials such as noise blankets rated to achieve nighttime noise performance levels of 55 dBA Leq and 75 dBA Lmax or less at noise sensitive receptors with a line-of-sight to the construction site at the intersection of Esplanade Avenue and Sanderson Avenue during nighttime construction. 	<ul style="list-style-type: none"> • Include mitigation measure in construction contracting specification • Implement mitigation measure during nighttime construction at the intersection of Esplanade Avenue and Sanderson Avenue • Building plans shall include documentation prepared by a noise consultant verifying compliance • Conduct periodic monitoring of mitigation commitments during construction 	<ul style="list-style-type: none"> • Prior to Construction • During Construction (Specifically during nighttime construction at the intersection of Esplanade Avenue and Sanderson Avenue) 	<ul style="list-style-type: none"> • EMWD • Design Contractor • Construction Contractor

<p>NOISE-2: Noise Best Management Practices. EMWD shall require the construction contractor to implement BMPs that ensure the following:</p> <ul style="list-style-type: none"> Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest to the Project site. Locate equipment staging areas at the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the Project site. Ensure appropriate maintenance and working order of equipment and vehicles, and that all construction equipment is equipped with manufacturers approved mufflers and baffles. Install sound-control devices in all construction equipment, no less effective than those provided on the original equipment. 	<ul style="list-style-type: none"> Include mitigation measure in construction contracting specification Conduct periodic monitoring of mitigation commitments during construction Retain construction monitoring report in project file 	<ul style="list-style-type: none"> Prior to Construction During Construction Construction Contractor
<p>NOISE-3: Operation Noise Standards. EMWD shall ensure that new aboveground facilities are designed such that operational noise complies with applicable noise standards at the property boundary.</p>	<ul style="list-style-type: none"> Include mitigation measure in design specifications Retain a copy of design specifications in project file 	<ul style="list-style-type: none"> Prior to Construction EMWD Design Contractor

Transportation

<p>TRAF-1: Traffic Control Plan. Prior to the start of construction of the raw water conveyance facilities, EMWD shall require the construction contractor to prepare a Traffic Control Plan. The Traffic Control Plan will show all signage, striping, delineated detours, flagging operations and any other devices that will be used during construction to guide motorists, bicyclists, and pedestrians safely through the construction area and allow for adequate access and circulation to the satisfaction of the City of San Jacinto and the City of Hemet. The Traffic Control Plan shall be prepared in accordance with the City of San Jacinto and the City of Hemet's traffic control guidelines and will be prepared to ensure that access will be maintained to individual properties, and that emergency access will not be restricted. Additionally, the Traffic Control Plan will ensure that congestion and traffic delay are not substantially increased as a result of the construction activities. Further, the Traffic Control Plan will include detours or alternative routes for bicyclists using on-street bicycle lanes as well as for pedestrians using adjacent sidewalks. In addition, EMWD shall provide written notice at least two weeks prior to the start of construction to owners/occupants along portions of Esplanade Avenue, Sanderson Avenue, and Commonwealth Avenue to be affected during construction.</p>	<ul style="list-style-type: none"> Include mitigation measure in construction contracting specification Provide written notice at least two weeks prior to the start of construction to owners/occupants along portions of Esplanade Avenue, Sanderson Avenue, and Commonwealth Avenue to be affected during construction Conduct periodic monitoring of Traffic Control Plan requirements during construction, including notification to owners/occupants affected by road closures Retain copy of Traffic Control Plan in project file 	<ul style="list-style-type: none"> Prior to Construction During Construction Construction Contractor
<p>During construction, EMWD shall verify that the construction contractor has maintained continuous vehicular and pedestrian access</p>		

to any affected residential driveways from the public street to the private property line, except where necessary construction precludes such continuous access for reasonable periods of time. Access will be reestablished at the end of the workday. If a driveway needs to be closed or interfered with as described above, EMWD shall notify the owner or occupant of the closure of the driveway at least five working days prior to the closure. The Traffic Control Plan shall include provisions to ensure that the construction of the conveyance pipeline does not interfere unnecessarily with the work of other agencies such as mail delivery, school buses, and municipal waste services.

Wildfire

Implementation of **Mitigation Measure TRAF-1** is required (see above).

- Include mitigation measure in construction contracting specification
 - Provide written notice at least two weeks prior to the start of construction to owners/occupants along portions of Esplanade Avenue, Sanderson Avenue, and Commonwealth Avenue to be affected during construction
 - Conduct periodic monitoring of Traffic Control Plan requirements during construction, including notification to owners/occupants affected by road closures
 - Retain copy of Traffic Control Plan in project file
- Prior to Construction
 - During Construction
- EMWD
 - Construction Contractor