

APPENDIX B

Mitigation, Monitoring, & Reporting Program

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Mitigation Monitoring and Reporting Program

Temecula Valley Recycled Water Pipeline and Appurtenances

State Clearinghouse No. 2014011024

Prepared for:

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The California Environmental Quality Act (CEQA) requires that when a public agency completes an environmental document which includes measures to mitigate or avoid significant environmental effects, the public agency must adopt a reporting or monitoring program. This requirement ensures that environmental impacts found to be significant will be mitigated. The reporting or monitoring program must be designed to ensure compliance during project implementation (Public Resources Code Section 21081.6).

In compliance with Public Resources Code Section 21081.6, the following MITIGATION MONITORING AND REPORTING CHECKLIST has been prepared for the Temecula Valley Recycled Water Pipeline and Appurtenances Project. This Mitigation Monitoring and Reporting Checklist is intended to provide verification that all applicable Conditions of Approval relative to significant environmental impacts are monitored and reported. Monitoring will include: 1) verification that each mitigation measure has been implemented, 2) recordation of the actions taken to implement each mitigation, and 3) retention of records in the Temecula Valley Recycled Water Pipeline and Appurtenances project file.

This Mitigation Monitoring and Reporting Program delineates responsibilities for monitoring the Project, but also allows Eastern Municipal Water District (EMWD) flexibility and discretion in determining how best to monitor implementation. Monitoring procedures will vary according to the type of mitigation measure. Adequate monitoring consists of demonstrating that monitoring procedures took place and that mitigation measures were implemented.

Reporting consists of establishing a record that a mitigation measure is being implemented and generally involves the following steps:

- ❖ EMWD distributes reporting forms to the appropriate persons for verification of compliance.
- ❖ Departments/agencies with reporting responsibilities will review the Environmental Impact Report or Initial Study and Mitigated Negative Declaration, which provides general background information on the reasons for including specified mitigation measures.
- ❖ Problems or exceptions to compliance will be addressed to EMWD as appropriate.
- ❖ Periodic meetings may be held during project implementation to report on compliance of mitigation measures.
- ❖ Responsible parties provide EMWD with verification that monitoring has been conducted and ensure, as applicable, that mitigation measures have been implemented. Monitoring compliance may be documented through existing review and approval programs such as field inspection reports and plan review.
- ❖ EMWD or Applicant prepares a reporting form periodically during the construction phase and an annual reporting summarizing all project mitigation monitoring efforts.

- ❖ Appropriate mitigation measures will be included in construction documents and/or conditions of permits/approvals.

Minor changes to the Mitigation Monitoring and Reporting Program, if required, would be made in accordance with CEQA and would be permitted after further review and approval by EMWD. Such changes could include reassignment of monitoring and reporting responsibilities, program redesign to make any appropriate improvements, and/or modification, substitution or deletion of mitigation measures subject to conditions described in CEQA Guidelines Section 15162. No change will be permitted unless the Mitigation Monitoring and Reporting Program continues to satisfy the requirements of Public Resources Code Section 21081.6.

Mitigation Monitoring and Reporting Program Checklist

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Mitigation Measure	Monitoring Process	Monitoring Timing	Responsible Person(s)	Date Completed
<p>Air Quality</p> <p>EMWD will appoint a construction relations officer to act as a community liaison concerning on-site construction activities including resolution of issues related to PM₁₀ generation.</p> <p>EMWD will include the following mitigation measures in its standard construction specifications:</p> <p>The contractor shall:</p> <ul style="list-style-type: none"> ❖ Utilize electricity from power poles instead of from temporary diesel or gasoline power generators, when feasible. ❖ Require the use of 2010 and newer diesel haul trucks (e.g., material delivery trucks and soil import/export) and if the lead agency determines that 2010 model year or newer diesel trucks cannot be obtained the lead agency shall use trucks that meet EPA 2007 model year NO_x emissions requirements. ❖ Require that all on-site construction equipment meet EPA Tier 3 or higher emissions standards according to the following: <ul style="list-style-type: none"> ✓ All construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. ✓ A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment. 	Project Records.	Prior to Construction.	Project Manager. By: _____ Date: _____	
	Site Inspection.	During Construction.	Field Engineering Inspector. By: _____ Date: _____	
	Site Inspection.	During Construction.	Field Engineering Inspector. By: _____ Date: _____	
	Site Inspection.	During Construction.	Field Engineering Inspector. By: _____ Date: _____	

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❖ Maintain construction equipment engines by keeping them properly tuned and maintained according to manufacturer's specifications.	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____
❖ Use alternative fuels or clean and low-sulfur fuel for equipment.	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____
❖ Idle trucks in accordance with the Airborne Toxic Control Measure (AC/TCM) to Limit Diesel Fueled Commercial Motor Vehicle Idling and other applicable laws.	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____
❖ Spread soil binders on site, where appropriate, unpaved roads and staging areas.	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____
❖ Water site and equipment as necessary to control dust.	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____
❖ Sweep all streets at least once per day using SCAQMD Rule 1186 certified street sweepers or roadway washing trucks if visible soil materials are carried to adjacent streets.	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____
❖ Conduct operations in accordance with SCAQMD Rule 403 requirements.	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____
❖ If necessary, wash off trucks leaving the site.	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____
❖ Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code (CVC) Section 23114.	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____
Biological Resources				
EMWD will:				
❖ Prior to project implementation, and during the appropriate survey period, conduct a focused survey for least Bell's vireo to determine presence/absence within Murrieta Creek within 500 feet of the chosen pipeline alignment.	Project Records.	Prior To Construction.	Project Manager.	By: _____ Date: _____

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<ul style="list-style-type: none"> ❖ A pre-construction clearance survey for nesting birds shall be conducted within 3 days prior to any ground disturbing activities. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active bird nests will occur. If an active avian nest is discovered during the 3-day pre-construction clearance survey, construction activities shall stay outside of a 300-foot buffer around the active nest. For raptor species, this buffer shall be expanded to 500-feet. It is recommended that a biological monitor be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged, normal construction activities can occur. 	Project Records.	Prior To Construction.	Project Manager.	By: _____ Date: _____
<ul style="list-style-type: none"> ❖ Once the preferred alternative is selected, EMWD shall have a jurisdictional delineation prepared in the area of any proposed crossing of Murrieta, Santa Gertrudis or Warm Springs Creeks. A site reconnaissance survey shall be conducted to perform a delineation that will determine jurisdictional "waters of the United States" and "waters of the State" (including potential wetlands), located within the boundaries of the project site. The delineation methodology shall be in compliance with the most recent U.S. Supreme Court decision, <i>Rapanos v. United States</i> and <i>Carabell v. United States</i>, which resulted in changes to Corps jurisdictional authority after 2007. The delineation shall result in: 	Project Records.	Prior To Construction.	Project Manager.	By: _____ Date: _____
<ul style="list-style-type: none"> ➤ A determination of the Corps' ordinary high water mark (OHWM) and an indication of the existence of any three (3) parameter wetlands on-site. The actual presence or absence of wetlands on-site shall be verified through the determination of the presence of hydrologic conditions, hydrophytic vegetation, and hydric soils pursuant to the September 2008 <i>Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)</i>; and 	Project Records.	Prior To Construction.	Project Manager.	By: _____ Date: _____
<ul style="list-style-type: none"> ➤ The CDFW's jurisdiction being identified via the top of bank of the on-site streambed or to the outer drip line of riparian vegetation (if present) pursuant to the 1994 <i>CDFG Field Guide to Lake and Streambed Alteration Agreements</i>. 	Project Records.	Prior To Construction.	Project Manager.	By: _____ Date: _____

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➤ In cases where isolated and/or Rapanos conditions are present, the delineation shall identify areas under the jurisdiction of the California Regional Water Quality Control Board, San Diego Region pursuant to the California Porter-Cologne Water Quality Act.	Project Records.	Prior To Construction.	Project Manager.	By: _____ Date: _____
❖ Should EMWD decide to utilize the open trench method of construction for any creek crossings or the jurisdictional delineation determines potential impacts to jurisdiction waters, EMWD shall file the following documents with the regulatory agencies:	Project Records.	Prior To Construction.	Project Manager.	By: _____ Date: _____
➤ ENG Form 4345 with the U.S. Army Corps of Engineers Application for a Nationwide Permit No. 12.	Project Records.	Prior To Construction.	Project Manager.	By: _____ Date: _____
➤ Form FG 2023 with the California Department of Fish and Wildlife, Notice of Lake or Streambed Alteration.	Project Records.	Prior To Construction.	Project Manager.	By: _____ Date: _____
➤ Form 200 with the California Regional Water Quality Control Board, San Diego Region, Report of Waste Discharge.	Project Records.	Prior To Construction.	Project Manager.	By: _____ Date: _____
➤ Section 401 Water Quality Certification Application with the California Regional Water Quality Control Board, San Diego Region.	Project Records.	Prior To Construction.	Project Manager.	By: _____ Date: _____
❖ EMWD shall require the contractor to prepare and implement a frac out (contingency) plan for any proposed crossings of Murrieta, Santa Gertrudis or Warm Springs Creeks by the trenchless method of construction (e.g., jack and bore or horizontal drilling).	Project Records.	Prior To Construction.	Project Manager.	By: _____ Date: _____
Cultural Resources				
EMWD will:				
❖ At least 30 days prior to beginning Project construction, EMWD shall contact the Pechanga Band of Luiseño Indians to notify the Pechanga Tribe of grading and excavation activities and to coordinate and develop a Cultural Resources Treatment and Monitoring Agreement. The Agreement shall address the treatment of known cultural resources; the designation, responsibilities, and participation of a professional Native American Tribal monitor during grading, excavation and other ground disturbing activities; Project grading and excavation schedule; terms of	Project Records.	Prior To Construction.	Project Manager.	By: _____ Date: _____

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<p>compensation for the monitor; and treatment and final disposition of any cultural resources, sacred items and human remains discovered on site. The Tribal monitor shall be allowed to monitor all grading, excavation and ground disturbing activities and, with the concurrence of EMWD's Field Engineering Inspector, have the authority to stop or redirect grading and/or excavation activities.</p>				
<ul style="list-style-type: none"> ❖ Monitoring activities shall include the following: <ul style="list-style-type: none"> ➤ Alternative 1: Monitoring of ground disturbing activities along Dendy Parkway between Winchester Road and Diaz Road. This portion of Alternative 1 crosses the mapped location of archaeological site CA-RIV 237 (Qéngva). ➤ Alternative 2: Monitoring of ground disturbing activities along Dendy Parkway between Winchester Road and Diaz Road. This portion of Alternative 2 crosses the mapped location of archaeological site CA-RIV 237 (Qéngva). ➤ Alternative 3: Monitoring of ground disturbing activities within the vacant lot between Enterprise Circle and Adams Avenue. This portion of Alternative 3 crosses through the purported location of the village site of Paa\$uku. ➤ Alternative 4: Monitoring of ground disturbing activities within the vacant lot between Enterprise Circle and Adams Avenue. As with Alternative 3, this portion of Alternative 4 crosses through the purported location of the village site of Paa\$uku. Ground disturbing activities along Commercial Center Drive between Via Montezuma and Enterprise Circle shall also be monitored. This portion of Alternative 4 crosses through the purported location of the village site of Muutui. ❖ All archaeological monitoring shall be performed under the direction of an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for prehistoric archaeology (National Park Service [NPS] 1983). 	<p>Onsite Inspection.</p>	<p>During Construction.</p>	<p>Field Engineering Inspector.</p> <p>By: _____ Date: _____</p>	<p>By: _____ Date: _____</p>
	<p>Project Records.</p>	<p>During Construction.</p>	<p>Project Manager.</p> <p>By: _____ Date: _____</p>	

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<p>Although there were no archeological resources as defined in §15064.5 of the State CEQA Guidelines identified within the immediate project area, there is always a possibility that buried cultural resources that were not previously identified could be unearthed during excavation activities. Therefore, EMWD will include the following mitigation measures in its standard construction specifications:</p> <ul style="list-style-type: none"> ❖ If inadvertent discoveries of cultural resources are encountered at any time during construction, these materials and their context shall be avoided until a qualified archeologist and a representative from the closest Tribe to the Project site have consulted with EMWD regarding appropriate avoidance and mitigation measures for the newly discovered resources. Construction personnel shall not collect or retain cultural resources. Prehistoric resources include, but are not limited to: chert or obsidian flakes; projectile points; mortars and pestles; dark, friable soil containing shell and bone; dietary debris; heat-affected rock; or human burials. Historic resources include stone or adobe foundations or walls; structures and remains with square nails; and refuse deposits (glass, metal, wood, ceramics), often found in old wells and privies. Pursuant to California Public Resources Code §21083.2(b) avoidance is the preferred method of preservation for archeological resources. 	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____
<ul style="list-style-type: none"> ❖ All sacred sites, should they be encountered within the project sites, shall be avoided and preserved as the preferred mitigation, if feasible. 	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____
<ul style="list-style-type: none"> ❖ In addition, EMWD will relinquish ownership of all cultural resources, including scared items, burial goods and all archeological artifacts that are found on the project site to the appropriate Tribe for proper treatment and disposition. 	Project Records.	During Construction.	Project Manager.	By: _____ Date: _____
<ul style="list-style-type: none"> ❖ If paleontological resources (e.g., fossils) are encountered at any time during construction of the project, construction personnel shall avoid altering these materials and their context until a qualified paleontologist has evaluated the situation. Project personnel shall not collect or retain paleontological resources. 	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____

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<ul style="list-style-type: none"> ❖ Consistent with State CEQA Guidelines §15064.5, subdivision (e), in the event of an accidental discovery or recognition of any human remains, the County Coroner shall be notified and construction activities at the affected work site shall be halted. If the remains are found to be Native American, the Native American Heritage Commission shall be notified within 24 hours. The NAHC must immediately notify the Most Likely Descendant(s) under Public Resources Code §5097.98 and the descendants must make recommendations or preference for treatment within 48 hours of being granted access to the site. Guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains in accordance with the provisions of Health and Safety Code §7050.5 and Public Resources Code §5097.98. 	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____
Hazards and Hazardous Materials				
To reduce potentially hazardous conditions and minimize the impacts from the handling of potentially hazardous materials, EMWD will include the following in its construction contract documents:				
<ul style="list-style-type: none"> ❖ The contractor(s) shall prepare a <i>Health and Safety Plan</i> in compliance with the requirements of Chapter 6.95, Division 20 of the Health and Safety Code (§§ 25500—25532). The plan shall include measures to be taken in the event of an accidental spill. 	Site Inspection.	Site Inspection.	Field Engineering Inspector.	By: _____ Date: _____
<ul style="list-style-type: none"> ❖ The contractor(s) shall enforce strict on-site handling rules to keep construction and maintenance materials out of receiving waters and storm drains. In addition, the contractor(s) shall store all reserve fuel supplies only within the confines of a designated construction staging area, refuel equipment only within the designated construction staging area, and regularly inspect all construction equipment for leaks. 	Site Inspection.	Site Inspection.	Field Engineering Inspector.	By: _____ Date: _____
<ul style="list-style-type: none"> ❖ The construction staging area shall be designed to contain contaminants such as oil, grease, and fuel products so that they do not drain towards receiving waters or storm drain inlets. 	Site Inspection.	Site Inspection.	Field Engineering Inspector.	By: _____ Date: _____

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Hydrology and Water Quality				
EMWD will require contractors to implement a program of best management practices (BMP's) and best available technologies to reduce potential impacts to water quality that may result from construction activities. To reduce or eliminate construction-related water quality impacts before the onset of construction activities, EMWD should obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Construction Permit. Construction activities shall comply with the conditions of this permit that include preparation of a stormwater pollution prevention plan, implementation of BMP's, and monitoring to insure impacts to water quality are minimized. As part of this process, multiple BMP's should be implemented to provide effective erosion and sediment control. These BMP's should be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable. BMP's to be implemented as part of this mitigation measure should include, but not be limited to, the following:	Site Inspection.	Site Inspection.	Field Engineering Inspector.	By: _____ Date: _____
❖ Temporary erosion control measures such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other groundcover shall be employed for disturbed areas.	Site Inspection.	Site Inspection.	Field Engineering Inspector.	By: _____ Date: _____
❖ Storm drain inlets on the site and in downstream offsite areas shall be protected from sediment with the use of BMP's acceptable to EMWD, local jurisdictions and the California Regional Water Quality Control Board, Santa Ana and San Diego Regions.	Site Inspection.	Site Inspection.	Field Engineering Inspector.	By: _____ Date: _____
❖ Dirt and debris shall be swept from paved streets in the construction zone on a regular basis, particularly before predicted rainfall events.	Site Inspection.	Site Inspection.	Field Engineering Inspector.	By: _____ Date: _____
❖ No disturbed surfaces shall be left without erosion control measures in place between October 15 and April 15. EMWD shall file a Notice of Intent with the Regional Board and require the preparation of a pollution prevention plan prior to commencement of construction. EMWD shall routinely inspect the construction site to verify that the BMP's specified in the pollution prevention plan are properly installed and maintained. EMWD shall immediately notify the contractor if there were a noncompliance issue and require immediate compliance.	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____
Noise				
To ensure compliance with the City of Murrieta's Noise Ordinance, EMWD will include the following in its construction contract documents:	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____

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<ul style="list-style-type: none"> ❖ All equipment used during construction shall be muffled and maintained in good operating condition. All internal combustion engines should be fitted with well-maintained mufflers in accordance with manufacturer's recommendations. ❖ Construction operations within the City of Murrieta shall be limited to the hours of 7 am to 7 pm Mondays through Saturday. No construction shall be allowed on Sundays or legal holidays. 				
Transportation/Traffic				
EMWWD will include the following in its contract documents for this project:				
<ul style="list-style-type: none"> ❖ Traffic control plans shall be prepared by a qualified professional engineer prior to construction. 	Project Records.	Prior to Construction.	Project Manager.	By: _____ Date: _____
<ul style="list-style-type: none"> ❖ Traffic control plans shall consider the ability of alternative routes to carry additional traffic and identify the least disruptive hours of construction site truck access routes and the type and location of warning signs, lights and other traffic control devices. Consideration shall be given to maintaining access to commercial parking lots, private driveways and sidewalks, bikeways and equestrian traffic to the greatest extent possible. 	Project Records.	Prior to Construction.	Project Manager.	By: _____ Date: _____
<ul style="list-style-type: none"> ❖ Traffic control plans shall comply with Part 6 of the California Manual on Uniform Traffic Control Devices and the California Supplement as determined by each affected local agency to minimize any traffic and pedestrian hazards that exist during project construction. 	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____
<ul style="list-style-type: none"> ❖ Encroachment permits for all work within public rights-of-way shall be obtained from each affected local agency prior to commencement of any construction. EMWWD shall comply with all traffic control requirements of the affected local agencies. 	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____
<ul style="list-style-type: none"> ❖ Working hours and lane closures shall be as specified by the affected local agency. 	Site Inspection.	During Construction.	Field Engineering Inspector.	By: _____ Date: _____