

# **MITIGATION MONITORING AND REPORTING PROGRAM FOR THE REGIONAL WATER FACILITIES MASTER PLAN FINAL PEIR**

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# MITIGATION MONITORING AND REPORTING PLAN

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## I. INTRODUCTION

The San Diego County Water Authority (Water Authority) has prepared a Program Environmental Impact Report (Program EIR) to provide the public and responsible agencies with information about the potential environmental effects of the proposed Regional Water Facilities Master Plan (Master Plan), located in San Diego County, California. The purpose of the Master Plan is to evaluate the ability of the Water Authority to continue to meet its mission based on current plans for water supply and facility improvements, and to recommend new facilities or improvements to existing facilities needed to meet the Water Authority's mission through 2030. The mission of the Water Authority is to provide a safe and reliable water supply to its member agencies serving the Sand Diego region.

The Program EIR was prepared in compliance with the California Environmental Quality Act (CEQA) of 1970 (Public Resources Code §§ 21000 *et seq.*), and the CEQA Guidelines (California Code of Regulations (CCR), Title 14, §§15000 *et seq.*). As described in the CEQA Guidelines Section 15121(a), an EIR is a public information document that assesses potential environmental impacts of a proposed project and identifies mitigation measures and alternatives to the project that could reduce or avoid adverse environmental impacts. CEQA requires that an agency incorporate feasible mitigation measures developed in the Program EIR into subsequent actions in the program. [p. 147, 15168 (c) (3)] This Mitigation Monitoring and Reporting Program (MMRP) has been developed to comply with CEQA requirements that a mitigation monitory plan be prepared prior to project approval if adverse impacts are identified in the associated Program EIR.

## II. PROJECT DESCRIPTION

The alternative with the highest apparent degree of reliability – seawater desalination – was identified by the Water Authority's Board of Directors as the Proposed Project and preferred alternative (inclusive of the new facilities and modifications to the existing system). Seawater desalination provides many benefits including increased reliability, the provision of a new drought-proof water supply with price certainty, new treatment capacity, and enhanced water quality. Also, diversification of supply sources is an important means for improving reliability, which the seawater desalination alternative provides.

New facilities and modifications to the Water Authority's existing system comprising the Proposed Project include pipelines, pump stations, flow regulatory structures (FRSs), flow control facilities (FCFs), regional water treatment capacity enhancements and carryover/seasonal storage.

The Master Plan has not attempted to describe every facility in detail, but rather describes the types of facilities needed to meet the needs of the region in the future. These types of facilities include:

- Rehabilitation of Existing Facilities;
- Expansion of Internal System Capacity;

- Addition of Regional Water Treatment Capacity;
- Addition of 100,000 acre-feet of Seasonal/Carryover Storage; and
- Seawater Desalination.

These recommended facilities are described in the Program EIR and are presented in **Table 1**.

<b>Table 1</b>		
<b>Summary of Facilities Comprising the Proposed Project</b>		
#	Project	Time Period**
<b>Expand Internal System Capacity</b>		
<i>Flow Regulatory Storage</i>		
1	Hubbard Hill FRS	2010-2015
2	Slaughterhouse Terminal Reservoir	2010-2015
3	North County Distribution Pipeline FRS	2010-2015
4	Mission Trails FRS II	2005-2010
	• Mission Trails Tunnel Pipeline and Vent Demolition	2005-2010
<i>Projects to Increase Regional Untreated Water Conveyance Capacity</i>		
5	Restore Untreated Water Delivery in La Mesa-Sweetwater Extension	2010-2015
6	Second Crossover Pipeline	2010-2015
7	San Diego 24/25/26 FCF	2005-2010
8	San Diego 12 FCF Expansion	2005-2010
9	Lower Otay Pump Station	2005-2010
10	Convert Pipeline 3 to Untreated Water from Crossover to Miramar	2005-2010
<b>Additional Water Treatment Capacity</b>		
<i>Projects to Supplement Treated-Water Aqueducts</i>		
11	Padre Dam Pump Station Expansion	2000-2005
12	Pipeline from Otay FCF 14 to Regulatory Reservoir	2010-2015
13	Poway Pump Station and Treated Water Connection	2005-2010
14	Escondido-Vista WTP Connection	
	a) Escondido-Vista Pipeline Conversion	2000-2005
	b) Escondido-Vista Pump Station	2000-2005
	c) Escondido-Dixon Pipeline	2000-2005
<i>Projects to Expand Regional Water Treatment Capacity</i>		
Options for Expanding Regional Treatment Capacity		2000-2005
15a	Olivenhain WTP – 50 mgd Expansion	
15b	Weese WTP – 50 mgd Expansion	
15c	Red Mountain WTP – new 50 mgd plant	
15d	Diversion Structure WTP – new 100 mgd plant	
<b>Additional Seasonal/Carryover Storage</b>		
16	Additional San Vicente Dam Raise Beyond Emergency Storage Project	2005-2010
<b>New Conveyance and Supply</b>		
17	Phase I – Seawater Desalination: Project at Encina (50 mgd)	2005-2010
	• Desalination Plant	
	• Desalinated Water Conveyance Facilities	
18	Expand Existing or Site New Seawater Desalination Plant*	
	Phase II – Seawater Desalination: Expand Capacity up to 100 mgd	2010-2015
	Phase III – Seawater Desalination: Expand Capacity up to 150 mgd	2015-2020
	a) Seawater Desalination Site Options for Phases II and III:	
	b) San Onofre – at San Onofre Nuclear Generating Station	
	c) Carlsbad – at Encina Power Station	

<b>Table 1</b>		
<b>Summary of Facilities Comprising the Proposed Project</b>		
<b>#</b>	<b>Project</b>	<b>Time Period**</b>
d)	South Bay – at South Bay Power Plant	
e)	Encina Water Pollution Control Facility	
f)	South Bay Ocean Outfall Site	
<p>* The ultimate level of seawater desalination development in the region would depend largely upon actual regional population growth, economics, availability of other high quality water sources, as well as an evaluation of the performance of the Encina seawater desalination facility, should it be approved and constructed.</p> <p>** The Water Authority used SANDAG’s 2020 Regionwide Forecasts to develop demand projections to be used in its water supply and facility planning. However, the actual start dates for construction of Proposed Project facilities would be based on actual growth.</p>		

**III. LEAD AGENCY**

The Water Authority is the Lead Agency for the preparation of the Program EIR and this MMRP in accordance with CEQA Guidelines (CCR, Title 14 §§ 15082 (a), 15103, 15375). As the lead agency, the Water Authority is responsible for ensuring that mitigation measures are implemented.

**IV. GOALS AND OBJECTIVES OF THE MMRP**

Mitigation measures are designed to avoid, minimize, rectify, reduce, eliminate or compensate for an adverse impact caused by construction, operation or maintenance of a project. As the program-level analysis presented in the Program EIR is not intended to describe or address impacts in detail, detailed evaluations of the impacts of specific projects will be conducted as part of a site-specific CEQA review. Accordingly, mitigation measures presented in this MMRP and in the Program EIR are standardized mitigation measures that can be applied selectively as applicable and appropriate to specific actions taken as part of the Master Plan implementation. One of the advantages of the program approach, according to CEQA, is that it allows lead agencies (i.e., the Water Authority) to consider broad mitigation measures early in the process and with greater flexibility. [p.147, 15168(b) (4)] Following site-specific impact analysis, additional mitigation measures may be necessary and will be identified as part of the respective CEQA documentation.

Mitigation measures included in this MMRP are presented by resource category (e.g., land use, biological resources, water resources etc.). Notation has been made where the same mitigation measure has been recommended for more than one resource category.

**V. VERIFICATION SCHEDULE**

As the mitigation measures presented herein are standardized and not specific to a particular facility, the verification schedule for mitigation measures is categorized as “pre-construction”, “during construction”, and/or “post construction”.

## **VI. SIGNIFICANT IMPACTS**

No significant impacts were identified in the Program EIR. However, as stated above, detailed evaluations of the potential impacts of specific projects will be conducted as part of a site-specific CEQA review for any subsequent projects. Following CEQA review, relevant mitigation measures presented as part of the Program EIR along with any appropriate mitigation measures necessary to address impacts identified in the site-specific analysis will be presented in a separate MMRP.

<b>SAN DIEGO COUNTY WATER AUTHORITY – REGIONAL WATER FACILITIES MASTER PLAN FINAL EIR MITIGATION MONITORING AND REPORTING PROGRAM</b>									
No.	Mitigation Measure	Method of Verification	Timing of Verification			Responsible Party	Completed		Comments
			Pre-Construction	During Construction	Post Construction		Initials	Date	
<b>AESTHETICS</b>									
1a	Where possible, projects shall be sited in topographically screened locations, in locations screened by vegetation, or adjacent to existing facilities and surface disturbance to reduce visual contrast with adjacent undisturbed areas.	Civil Engineer	X			Water Authority			
1b	Design elements of the facility will incorporate surrounding architecture and topographical features and blend with the surrounding vegetation and colors.	Civil Engineer	X			Water Authority			
1c	Project facilities shall be painted inconspicuous colors that match the natural color scheme of the adjacent vegetation, rock formations, or exposed soils to reduce visual contrast.	Civil Engineer, Construction Contractor	X	X	X	Water Authority			
1d	Landscaping and/or fencing that screens project facilities from the view of adjacent residences and roads could also reduce the severity of aesthetic impacts.	Civil Engineer, Construction Contractor		X	X	Water Authority			Landscaping will be provided by a contractor and shall be installed as soon as possible after construction.
2a	Avoid scenic resources, such as mature trees, rock outcroppings, and historic buildings, if possible. Where unavoidable, the removal of these resources will be minimized to the extent practical.	Civil Engineer, Construction Contractor	X	X		Water Authority			See Aesthetics 1b above.

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No.	Mitigation Measure	Method of Verification	Timing of Verification			Responsible Party	Completed		Comments
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<b>AESTHETICS (continued)</b>									
2b	Should any of the Proposed Project facilities be constructed within the viewshed of a designated State or County scenic highway, the mitigation measures described above for Aesthetic Impact 1 will be implemented to reduce the severity of the aesthetic impacts to less than significant levels.	Civil Engineer	<b>X</b>			Water Authority			See Aesthetics Mitigation Measure 1.
2c	Any Proposed Project facilities within the coastal zone will be subject to design requirements and mitigation measures that protect coastal views and aesthetics as outlined in the applicable LCP and/or the requirements of the CCC.	Civil Engineer	<b>X</b>			Water Authority			
3a	Proposed Project facilities that will require night lighting will include a lighting plan at the time of final design that will identify the location of lights, how they will be aimed and types of shielding that will be utilized to avoid the production of glare, minimize uplighting and light spill, and avoid the spread of stray light across site boundaries.	Civil Engineer, Construction Contractor	<b>X</b>	<b>X</b>	<b>X</b>	Water Authority			
3b	To reduce daytime glare, concrete or metal surfaces and structures will be constructed with materials that minimize reflection of light or sunshine.	Civil Engineer, Construction Contractor	<b>X</b>	<b>X</b>		Water Authority			See Aesthetics 1b above.



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<b>AESTHETICS (continued)</b>									
4	During construction, removal of vegetation and grading shall be minimized to reduce visible disturbance. Following completion of construction, pipeline corridors and other disturbed areas shall be graded to follow the natural landform and revegetated to reduce visual contrast (Water Authority's Conditions and Standard Specifications Section 02940, Revegetation).	Civil Engineer, Construction Contractor		X	X	Water Authority			See Aesthetics 1b above.
<b>AGRICULTURAL RESOURCES</b>									
1a	Avoidance of construction on agricultural land where feasible.	Civil Engineer, Construction Contractor	X	X		Water Authority			
1b	If possible, schedule construction during periods of non-production.	Civil Engineer, Construction Contractor	X	X		Water Authority			
1c	Compensate land owner for loss of land and/or production.	Water Authority	X			Water Authority			
<b>AIR QUALITY</b>									
1	The following mitigation measure will be implemented during construction of the Proposed Project to reduce exhaust emissions of CO, NO <sub>2</sub> , SO <sub>2</sub> , and PM <sub>10</sub> . <ul style="list-style-type: none"> <li>Heavy-duty diesel equipment engines will be properly tuned and maintained to manufacturers' specifications to ensure minimum emissions under normal operations. The Water Authority will require its construction contractors to implement this measure to the extent practical.</li> </ul>	Construction Contractor		X		Construction Contractor			

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No.	Mitigation Measure	Method of Verification	Timing of Verification			Responsible Party	Completed		Comments
			Pre-Construction	During Construction	Post Construction		Initials	Date	
<b>AIR QUALITY (continued)</b>									
1 cont	The following mitigation measures will be implemented to reduce fugitive dust and PM <sub>10</sub> emissions: <ul style="list-style-type: none"> <li>Apply water or chemical dust suppressants to unstabilized disturbed areas and/or unpaved roadways in sufficient quantity and frequency to maintain a stabilized surface.</li> <li>Water or water-based chemical additives will be used in such quantities to control dust on areas with extensive traffic including unpaved access roads.</li> <li>Vehicles hauling dirt or fill will be covered with a tarp or other means.</li> </ul>	Construction Contractor		<b>X</b>		Construction Contractor			
2	Design standards would incorporate odor-reducing measures when necessary to reduce odor levels to less than significant levels.	Civil Engineer	<b>X</b>			Water Authority			
<b>BIOLOGICAL RESOURCES</b>									
1	Implement Water Resources Mitigation Measure 1, Air Quality Mitigation Measure 1, and Geology and Soils Mitigation Measures 2 and 4.	Civil Engineer	<b>X</b>			Water Authority			See Water Resources Mitigation Measure 1, Air Quality Mitigation Measure 1, and Geology and Soils Mitigation Measures 2 and 4.

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<b>BIOLOGICAL RESOURCES (continued)</b>									
1 cont	In areas where listed species may occur, ensure that biological surveys are conducted according to U.S. Fish and Wildlife Service protocols and special-status plant species surveys are conducted at the appropriate time of year by a qualified biologist.	Biological Monitor	X			Water Authority			
	Avoid, to the extent practicable through design or site selection, special-status species, important habitats, and wetlands areas.	Civil Engineer, Construction Contractor, Biological Monitor	X	X		Water Authority			
	Utilize existing Water Authority standard construction specifications ( <i>General Conditions and Standard Specifications</i> , April 1999) to minimize direct and indirect impacts of construction on natural resources unless more stringent measures are identified in project-specific review. These specifications may be used for construction within or adjacent to sensitive habitats requiring such mitigating measures as habitat revegetation, erosion control, and brush clearing	Civil Engineer	X	X		Water Authority			
	Initiate consultation with the appropriate State or Federal jurisdictional agency if the potential for special-status species disturbance exists following final site selection.	Biological Monitor	X			Water Authority			

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<b>BIOLOGICAL RESOURCES (continued)</b>									
1 cont	Comply with all applicable permit conditions stated in the ACOE Nationwide 12 permit and/or CDFG Section 1600 Streambed Alteration Agreement.	Civil Engineer, Construction Contractor, Biological Monitor	X	X	X	Water Authority			
2	Implement Water Resources Mitigation Measure 2.	Civil Engineer, Biological Monitor, Plant Operator			X	Water Authority			See Water Resources Mitigation Measure 2
<b>CULTURAL RESOURCES</b>									
1a	On-site cultural resource surveys shall be conducted by a qualified archaeologist prior to construction of a new facility. The purpose of this survey will be to more precisely locate and map significant cultural resources.	Archaeological Monitor	X			Water Authority			
1b	Any resources discovered by the qualified archaeologist as a result of the survey shall be evaluated as to their cultural and historical significance and appropriate mitigation measures identified.	Archaeological Monitor	X			Water Authority			
1c	The qualified archaeologist shall recommend archaeological field monitoring when excavation occurs in areas where subsurface resources are considered to possibly exist. The monitoring may include participation by a Native American monitor.	Archaeological Monitor		X		Water Authority			

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			Pre-Construction	During Construction	Post Construction		Initials	Date	
<b>CULTURAL RESOURCES (continued)</b>									
1d	In the event that unanticipated cultural resources are encountered during Proposed Project construction, all earthmoving activity shall cease until the services of a qualified archaeologist are retained. The archaeologist shall examine the findings, assess their significance, and offer recommendations for procedures deemed appropriate to either further investigate or mitigate adverse impacts to those cultural resources that have been encountered (e.g., excavate the significant resource). These additional measures shall be implemented.	Construction Contractor, Archaeological Monitor		X		Water Authority			
1e	If human bone or bones of unknown origin is found during Proposed Project construction, all work shall stop in the vicinity of the find and the County Coroner and the Water Authority shall be contacted immediately. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission who shall notify the person it believes to be the most likely descendant. The most likely descendant shall work with the Water Authority to develop a program for reinterment of the human remains and any associated artifacts. No additional work shall take place within the immediate vicinity of the find until the identified appropriate actions have been completed.	Construction Contractor, Archaeological Monitor		X		Water Authority			

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<b>GEOLOGY AND SOILS</b>									
1a	To reduce the hazards of seismic damage, project sites will not be located within obvious fault zones, if possible. A geotechnical engineering investigation consistent with California geologic and engineering standards will be conducted for applicable facilities by a licensed geotechnical engineer. The geotechnical engineer will prepare a report that summarizes the results of a field investigation, including site inspection and soil testing, potential geologic hazards (including fault rupture and severe secondary effects of earthquakes), along with design criteria and construction methods to effectively construct the Proposed Project with an acceptable level of risk. The report will address all geologic and geotechnical factors related to the design and construction of the Proposed Project. The geotechnical engineering investigation will delineate areas of active and potentially active faults. To the extent possible, it will identify fault traces and locate them in the field so faults can be avoided.	Geotechnical Engineer, Civil Engineer, Construction Contractor	X	X		Water Authority			

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			Pre-Construction	During Construction	Post Construction		Initials	Date	
<b>GEOLOGY AND SOILS (continued)</b>									
1b	All practicable precautions will be taken to design and construct project facilities to withstand the projected ground shaking associated with the most probable magnitude earthquake (MPE) in the area. This includes secondary hazards induced by earthquakes (liquefaction, lurching, lateral spreading, rapid differential settlement, induced landslides, and rock-fall avalanche). The MPE represents the strongest earthquake likely to occur over the design life of the projects. Project structures will be designed using project-specific criteria in accordance with the latest revision of the NESC (ANSI C.2) and the UBC.	Geotechnical Engineer, Civil Engineer, Construction Contractor	X	X		Water Authority			
2	Prior to construction, soils will be evaluated to determine if they are expansive and if they may have potential effects on the proposed facilities. Where they represent a potential hazard, solutions recommended by a licensed geotechnical engineer, such as excavation and replacement of the expansive soils with compacted backfill, will be required. If imported backfill material is used, it will be certified to be free of noxious weeds and propagates (i.e., seeds and root fragments).	Geotechnical Engineer, Civil Engineer, Construction Contractor	X			Water Authority			

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			Pre-Construction	During Construction	Post Construction		Initials	Date	
<b>GEOLOGY AND SOILS (continued)</b>									
3a	<p>Erosion Control Plans shall be prepared as necessary for each of the Proposed Project facilities which identify the best management practices that will be implemented to reduce soil loss and water quality impacts. The Erosion Control Plan will include, but not be limited to:</p> <ul style="list-style-type: none"> <li>• Confine all vehicular traffic associated with construction to designated rights-of-way, material yards, and access roads.</li> <li>• Limit disturbance of soils and vegetation removal to the minimum area necessary for access and construction.</li> <li>• Where vegetation removal is necessary, use cutting/mowing methods instead of blading, wherever possible.</li> <li>• Graded material will be sloped and bermed, where possible, to reduce surface water flows across the graded area.</li> <li>• Use detention basins, certified weed-free straw bales, or silt fences, where appropriate.</li> <li>• Use drainage control structures, where necessary, to direct surface drainage away from disturbance areas and to minimize runoff and sediment deposition downslope from all disturbed areas. These structures include culverts, ditches, water bars (berms and cross ditches), and sediment traps.</li> </ul>	Geotechnical Engineer, Civil Engineer, Construction Contractor, Biological Monitor	X	X		Water Authority			



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<b>GEOLOGY AND SOILS (continued)</b>									
3b	Implement Water Resources Mitigation Measure 1.	Geotechnical Engineer, Civil Engineer, Construction Contractor, Biological Monitor	X	X	X	Water Authority			See Water Resources Mitigation Measure 1
<b>LAND USE</b>									
1	Implement Traffic Mitigation Measures 1 and 2, and Noise Mitigation Measures 1, 2, and 3.	Civil Engineer	X	X		Water Authority			See Traffic Mitigation Measures 1 and 2, and Noise Mitigation Measures 1, 2, and 3.
2a	For existing land uses that will be displaced by Proposed Project facilities, the Water Authority will compensate property owners at fair market value as determined by certified independent appraisers. For extractive industry impacts, this compensation will include loss of business for resources that could not be extracted.	Certified Independent Appraiser, Water Authority	X			Water Authority			
2b	Relocation assistance will be offered to displaced residents and commercial businesses in accordance with the Water Authority's Administrative Code and existing State law.	Water Authority	X			Water Authority			
3a	The construction contractor will coordinate construction activities with the operator of the affected utility to minimize disruption of service.	Construction Contractor	X	X		Water Authority			

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<b>LAND USE (continued)</b>									
3b	Where relocation or modification of existing linear projects or disruption of service will result from Proposed Project construction, the Water Authority will negotiate appropriate compensation.	Water Authority	X	X		Water Authority			
4	While zoning ordinances do not apply to the location or construction of facilities used for the production, generation, storage, or transmission of water (California Government Code Section 53091), the Water Authority will submit project proposals to the planning agencies of communities potentially affected for review of general plan conformity.  The Proposed Project facilities are expected to be incorporated into the subarea plans in a manner that will allow planned preserve areas and will conform to the appropriate subarea plan with regard to site design criteria and mitigation. The general guidelines collectively specified within the MSCP and MHCP will allow compatible development for these proposed projects in the appropriate areas.	Civil Engineer, Water Authority	X			Water Authority			

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<b>NOISE</b>									
1a	<p>The Water Authority shall ensure that as construction activities are conducted consistent with the Water Authority’s General Conditions and Standard Specifications, Section 01560 Temporary Controls, including:</p> <ul style="list-style-type: none"> <li>• Comply with all local sound control and noise level rules, regulations, and ordinances which apply to any work performed.</li> <li>• Equip each internal combustion engine used for any purpose on the job or related to the job with a muffler of a type recommended by the manufacturer. Do not operate internal combustion engines on the project without said muffler.</li> <li>• Noise level requirements shall apply to all equipment on the job or related to the job, including but not limited to trucks and transient equipment that may or may not be owned by the contractor. Avoid the use of loud sound signals in favor of light warnings except where required by safety laws for the protection of personnel.</li> </ul>	Civil Engineer, Construction Contractor		X		Water Authority			

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<b>NOISE (continued)</b>									
1b	Construction work shall be accomplished on a regularly scheduled eight (8) hour per day work shift basis, Monday through Friday, between the hours of 7:00 a.m. and 5:00 p.m. unless otherwise limited or revised by government permits for construction or as specified elsewhere (Water Authority's General Conditions and Standard Specifications, Section 70.11 [Hours of Work]).	Civil Engineer, Construction Contractor		X		Construction Contractor			
1c	Some idling of construction equipment will occur; however, equipment shall be turned off when not being utilized.	Construction Contractor		X		Construction Contractor			
1d	Noise barriers may be necessary around noisy equipment or near a noise sensitive area if other administrative controls cannot be implemented.	Construction Contractor		X		Construction Contractor			

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<b>NOISE (continued)</b>									
2	The Water Authority shall ensure that all blasting activities are conducted consistent with the Water Authority’s General Conditions and Standard Specifications, Section 0229 Blasting, including: <ul style="list-style-type: none"> <li>Blasting during construction shall only be conducted when other practicable excavation methods are not available.</li> <li>Providing advance written notification of the date and time of any blasting activities to all residents and businesses within 400 feet of the blast area.</li> <li>In the event that blasting is necessary, a Blast Plan shall be developed and approved by the local regulatory authority.</li> </ul>	Civil Engineer, Construction Contractor, Blasting Contractor	X	X		Water Authority			
3a	If noise from equipment or machinery operation exceeds the local regulations for noise sensitive locations, low noise equipment or machinery shall be provided to achieve the necessary noise limits.	Construction Contractor		X		Construction Contractor			
3b	If low noise equipment or machinery is insufficient in meeting the required noise limits, a noise barrier (e.g., building or other method) shall be placed around the equipment to provide the necessary noise attenuation.	Civil Engineer, Construction Contractor		X		Construction Contractor			
3c	A combination of items 3(a) and 3(b) above shall be used to control the noise level to acceptable limits from the equipment or machinery operating at the site.	Construction Contractor		X		Construction Contractor			

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			Pre-Construction	During Construction	Post Construction		Initials	Date	
<b>PALEONTOLOGICAL RESOURCES</b>									
1	<p>In order to mitigate potential impacts, the following measures shall be implemented in the event project construction will occur on geologic formations of moderate to high sensitivity for paleontological resources. These activities will be carried out by a qualified professional paleontologist.</p> <ul style="list-style-type: none"> <li>Existing bedrock outcrops and (possibly) excavation of test trenches will be inspected for fossil remains;</li> <li>Surface collection of discovered fossil remains will be conducted via simple excavation or exposed specimens and possibly plaster-jacketing large and/or fragile specimens or more elaborate quarry excavations of richly fossiliferous deposits;</li> <li>Stratigraphic and geologic data will be recovered to provide context for recovered fossil remains. These data will typically include a description of lithologies of fossil-bearing strata, measurement and description of the overall stratigraphic section, and photographic documentation of the setting;</li> <li>Laboratory preparation of collected fossil remains will be conducted for potentially significant or unique finds;</li> </ul>	Civil Engineer, Paleontological Monitor	X			Water Authority			

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<b>PALEONTOLOGICAL RESOURCES (continued)</b>									
1 cont	<ul style="list-style-type: none"> <li>Prepared significant or unique fossil remains will be cataloged and identified;</li> <li>Cataloged fossil remains will be transferred for storage to an accredited institution; and</li> <li>A final report summarizing the findings from the laboratory and field, stratigraphic units inspected, typed of fossils discovered, and the significance of the curated collection will be prepared.</li> </ul>	Civil Engineer, Paleontological Monitor	X			Water Authority			
<b>PUBLIC SAFETY AND HAZARDOUS MATERIALS</b>									
1a	Prior to construction, develop and implement (in consultation with the Fire Marshall) a Fire Prevention Program for each facility, as necessary.	Civil Engineer, Fire Marshal, Construction Contractor	X	X		Water Authority			
1b	Develop an Emergency Response Plan (ERP) for each new or expanded facility, as necessary. Each ERP shall be developed by the facility operator in coordination with the County Office of Emergency Services, the County Environmental Health Department, and the appropriate Fire Protection District.	Civil Engineer, Facility Operator			X	Water Authority			

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<b>PUBLIC SAFETY AND HAZARDOUS MATERIALS (continued)</b>									
2abc	The Water Authority will develop an ERP in conjunction with the local fire department that will incorporate appropriate actions in the case of an accidental release of hazardous material. For example, features that could be installed to minimize the risk of public exposure to hazardous materials or gases due to an unintentional release include: a) Chlorine and ammonia gas detection and alarm systems that operate continuously 24 hours per day, 7 days per week. b) Wind monitors to determine the down wind threatened areas. c) Coordination and pre-emergency planning with the LEPCs and the surrounding communities.	Civil Engineer, Fire Marshal, Construction Contractor	X	X	X	Water Authority			



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<b>PUBLIC SAFETY AND HAZARDOUS MATERIALS (continued)</b>									
3	<p>In order to mitigate potential health hazards related to exposure of construction personnel to hazardous materials in the soil, the Water Authority will complete the following steps for each site proposed for disturbance as part of a project-facilitated construction activity in the project area:</p> <p>Step 1. Investigate the site to determine whether it has a record of hazardous material contamination; and if so, characterize the site according to the nature and extent of soil contamination that is present before development activities proceed at that site.</p> <p>Step 2. Determine the need for further investigation and/or remediation of the soils conditions on the contaminated site. For example, if there will be little or no contact with contaminated soil, industrial cleanup levels will likely be applicable. If the slated development activity could involve human contact with soils, such as may be the case with residential use, then Step 3 should be completed. If no human contact is anticipated, then no further mitigation is necessary.</p>	Hazardous Materials Monitor, Civil Engineer, Construction Contractor	X	X		Water Authority			

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<b>PUBLIC SAFETY AND HAZARDOUS MATERIALS (continued)</b>									
3 cont	Step 3. If it is determined that extensive soil contact will accompany the intended use of the site, undertake a Phase II investigation involving soil sampling at a minimum. Should further investigation reveal high levels of hazardous materials in the site soils, mitigate health and safety risks according to County Department of Environmental Health and RWQCB regulations. This will include site-specific health and safety plans prepared prior to undertaking any building or utility construction.	Hazardous Materials Monitor, Civil Engineer, Construction Contractor	X	X		Water Authority			
	In order to mitigate potential health hazards related to exposure to unexploded ordnances, prior to the start of construction, the Water Authority will have surveys performed of the MTRP facility site, any construction lay down areas, and any proposed unimproved parking areas near the project site for the presence of unexploded ordnances. The survey will include identification of potential unexploded ordnance locations, from which a determination of what is present shall be made. Once the survey is completed, the appropriate contractor shall arrange for the removal of any unexploded ordnances found. In addition, the unexploded ordnance contractor will provide training, as needed, to construction contractors related to the identification of unexploded ordnances.	Unexploded Ordinance Contractor, Construction Contractor, Civil Engineer	X			Water Authority, Construction Contractor			
4	Critical unmanned facilities will be equipped with appropriate security features to prevent unauthorized entry, as necessary.	Construction Contractor, Civil Engineer		X	X	Construction Contractor, Water Authority			

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<b>PUBLIC SAFETY AND HAZARDOUS MATERIALS (continued)</b>									
5a	The Water Authority or its construction contractor would close construction areas from public access and will implement Traffic Control Plans to minimize hazards to recreational users from construction-related traffic.	Civil Engineer, Construction Contractor		<b>X</b>		Water Authority, Construction Contractor			
5b	The Water Authority will require its workers to exercise caution and maintain safe travel speeds when driving within recreational and open space areas to minimize the risk of accidents with recreational users.	Civil Engineer, Construction Contractor		<b>X</b>		Water Authority, Construction Contractor			
5c	The Water Authority will fence and lock potentially dangerous structures to prevent members of the public from climbing on or entering these facilities to minimize the risk of injuries or falls.	Civil Engineer			<b>X</b>	Water Authority			
<b>RECREATION</b>									
1a	Designation of alternate trail routes around the Proposed Project facilities or facility construction areas. This will provide uninterrupted use of the trails for recreational users.	Civil Engineer		<b>X</b>		Water Authority			
1b	Restoration and/or reopening of recreational facilities temporarily affected by Proposed Project facilities, such as parking areas, picnic grounds, trails, and other closed facilities after completion of project construction.	Civil Engineer			<b>X</b>	Water Authority			
1c	Relocation or replacement of recreational facilities permanently displaced or inundated by Proposed Project facilities, such as boat ramps, picnic grounds, beaches, concession stands, parking areas, restroom facilities, etc.	Civil Engineer			<b>X</b>	Water Authority			

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<b>RECREATION (continued)</b>									
2	Affected public agencies will be compensated for possible loss of business revenue from disruption of recreational activities during construction.	Water Authority	X			Water Authority			
3	A few of the Proposed Project facilities will be located within parks and designated open space areas. For these projects, the Water Authority will coordinate with the applicable local planning department or management agency to develop a project design that minimizes impacts to users of the recreation area.	Civil Engineer	X			Water Authority			
<b>TRAFFIC AND TRANSPORTATION</b>									
1a	<p>Prior to the start of the construction phase of Proposed Project facilities, the contractor shall submit a Traffic Control Plan to the appropriate local jurisdiction for review and approval. The plan shall be consistent with the Caltrans Traffic Manual, Chapter 5, and should include the following information:</p> <ul style="list-style-type: none"> <li>• Signage posted in areas designated as temporary traffic control zones; and</li> <li>• Speed limits to be observed within control zones.</li> </ul>	Construction Contractor	X			Water Authority			
1b	Where appropriate for work on public roadways, the Water Authority will submit a set of proposed construction plans to agencies with jurisdiction over the roadways to allow them to comment on the proposed plans.	Civil Engineer, Construction Contractor, Agencies with roadway jurisdiction	X			Water Authority			

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<b>TRAFFIC AND TRANSPORTATION (continued)</b>									
1c	<p>During construction of water pipelines, the Water Authority shall implement traffic management measures, as deemed necessary and applicable by a properly licensed engineer:</p> <ul style="list-style-type: none"> <li>• Temporary traffic lanes shall be marked, barricades and lights shall be provided at excavations and crossings.</li> <li>• Pipeline construction activities shall affect the least number of travel lanes as possible, with both directions of traffic flow being maintained at all times, to the extent feasible.</li> <li>• Pipeline construction shall avoid the morning and evening peak traffic periods to the extent feasible.</li> <li>• Construction within any major intersection shall be restricted to only one-half of an intersection at any one time in order to maintain one lane of traffic flow in each direction. Pipeline crossings of freeways, light rail, and railroad tracks shall be constructed using methods that provide minimal disruption to freeway, lightrail, and railroad operations, to the extent feasible.</li> </ul>	Civil Engineer, Construction Contractor	X	X		Water Authority			

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<b>TRAFFIC AND TRANSPORTATION (continued)</b>									
Ic cont	<ul style="list-style-type: none"> <li>Construction across on- and off-street bikeways shall be done in a manner that allows for safe bicycle access or bicycle traffic will be safely re-routed.</li> <li>Private driveways located within construction areas will remain open to maintain access to the maximum extent feasible. It is anticipated that if a trench will remain open in front of a private driveway for more than five days, metal plates would be used to provide 24-hour access, except for up to 3 hours of blockage as needed during construction.</li> <li>To minimize cumulative traffic impacts as a result of lane closures during construction, the Water Authority will require that the project construction contractor(s) coordinate with construction contractor(s) for any concurrent nearby projects that are planned for construction.</li> </ul>	Civil Engineer	X	X		Water Authority			
Id	During construction of water transmission pipelines, the Water Authority shall notify all affected fire, police, and paramedic departments/services as well as any affected public transportation agencies of the schedule and duration of construction activities.	Civil Engineer, Construction Contractor		X		Water Authority			

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<b>TRAFFIC AND TRANSPORTATION (continued)</b>									
1e	The Water Authority shall seek to coordinate all traffic-control plans in the local project area so that conflicts can be minimized (by staggering construction schedules).	Civil Engineer, Construction Contractor	X	X		Water Authority			
2	Following construction or during construction, as necessary to maintain safe driving conditions, any damage to existing roadways caused by construction vehicles will be repaired as required (Water Authority's General Conditions and Standard Specifications, Section 01530, Protection of Existing Facilities).	Construction Contractor		X	X	Construction Contractor			
<b>UTILITIES AND PUBLIC SERVICES</b>									
1	The Water Authority shall ensure that the construction contractor complies with the Water Authority's General Conditions and Standard Specifications, Section 01530 Protection of Existing Facilities. This section describes procedures for locating, protecting, and relocating existing underground utilities, so that any service interruptions are temporary.	Civil Engineer, Construction Contractor		X		Water Authority			
2	Impacts to schools related to construction activity shall be mitigated as follows:	Civil Engineer, Construction Contractor	X			Water Authority			See Traffic and Transportation Mitigation Measure 1
	<ul style="list-style-type: none"> <li>Implement Traffic and Transportation Mitigation Measure 1.</li> <li>Potentially disruptive construction activities may be scheduled when the schools are not in session.</li> </ul>	Civil Engineer, Construction Contractor		X		Construction Contractor			

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<b>WATER RESOURCES</b>									
1a	The Water Authority will comply, where applicable, with all current State, regional, and city water quality provisions.	Civil Engineer, Construction Contractor, Geotechnical Engineer	X	X	X	Water Authority			
	The Water Authority shall ensure that all ground disturbing activities are conducted consistent with the Water Authority's General Conditions and Standard Specifications, including but not limited to Sections 02270 (Temporary Erosion Control), 02140 (Dewatering), 02200 (Earthwork), 02310 (Tunneling) and 02940 (Revegetation).	Civil Engineer, Construction Contractor, Geotechnical Engineer		X	X	Water Authority			
1b	The Water Authority shall file with the RWQCB a <i>Notice of Intent</i> to comply with the Statewide General Permit for Construction Activities.	Civil Engineer	X			Water Authority			
1c	The Water Authority shall prepare and implement a project-specific Stormwater Pollution Prevention Plan (including an erosion control plan) if grading or extensive excavation is involved.	Geotechnical Engineer, Civil Engineer, Construction Contractor	X	X	X	Water Authority			
1d	The Water Authority shall implement a monitoring, inspection, and documentation program to assure the effectiveness of control measures, including post-construction measures.	Civil Engineer		X	X	Water Authority			
1e	The Water Authority shall obtain or comply with existing General Stormwater Discharge Permit(s) for industrial activities, where applicable.	Civil Engineer	X	X	X	Water Authority			
1f	The Water Authority shall comply with the NPDES Phase II Non-Point Discharge Program.	Civil Engineer	X	X	X	Water Authority			



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<b>WATER RESOURCES (continued)</b>									
1g	Implement Geology and Soils Mitigation Measure 2.	Geotechnical Engineer, Civil Engineer, Construction Contractor	<b>X</b>			Water Authority			See Geology and Soils Mitigation Measure 2.
2	<p>The primary mitigation for potential impacts caused by brine discharge is the mixing of this effluent stream with another existing ocean discharge. The mixing volume would typically be larger than the brine effluent volume from the seawater desalination plant, such that the aggregate salinity of the combined effluent streams would not degrade ocean water beyond regulated limits, and would not harm marine biota. Salinity concentrations would return to near-ambient within a short distance of the point-of-discharge due to further dilution and mixing with surrounding ocean water.</p> <p>Discharging membrane cleaning waters and pre-treatment filter waste to the municipal sewage collection system or building on-site handling facilities will mitigate the potential impact caused by filter maintenance and the pre-treatment process.</p>	Civil Engineer, Biological Monitor, Plant Operator			<b>X</b>	Water Authority			