

I. RECORD OF PROCEEDINGS

For purposes of CEQA and these Findings, the Record of Proceedings for the Project consists of the following documents, at a minimum:

- All public notices issued by the Water Authority in conjunction with the Project, including
 - NOP, circulated on February 10, 2003;
 - Notice of Completion, filed on August 5, 2003; and
 - Notice of Availability, published in the San Diego Union Tribune on August 5, 2003.
- Draft PEIR and Final PEIR, including appendices and technical studies included or referenced in the Draft PEIR and Final PEIR.
- Draft Regional Water Facilities Master Plan (Master Plan) December 2002.
- All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the Project prepared by Greystone Environmental Consultants, Inc. to the Water Authority, including the subconsultants retained by Greystone Environmental Consultants, Inc.
- All documents and information submitted to the Water Authority by responsible, trustee, or other public agencies, or by individuals or organizations, in connection with the Project, up through the date the Water Authority Board of Directors approved the Project.
- Minutes and/or verbatim transcripts of all information sessions, public meetings, and public hearings held by the Water Authority, in connection with the Project.
- Any documentary or other evidence submitted to the Water Authority at such information sessions, public meetings, and public hearings.
- Matters of common knowledge to the Water Authority, including, but not limited to federal, state, and local laws and regulations.
- Any documents expressly cited in these findings or the above referenced documents, in addition to those cited above.
- Any other materials required to be in the Record of Proceedings by Public Resources Code Section 21167.6, subdivision (e).

The custodian of the documents comprising the record of proceedings is the Water Authority, whose office is located at 4677 Overland Avenue, San Diego, California, 92123.

The Water Authority has relied on all of the documents listed above in reaching its decision on the Project, even if every document was not formally presented to the Water Authority decision makers as part of the Water Authority's files generated in connection with the Project. Without exception, any documents set forth above that are not found in the Project files fall into one of two categories. Many of the documents reflect prior planning or legislative decisions with which the Water Authority was aware in approving the Project (see *City of Santa Cruz v. Local Agency Formation Commission* (1978) 76 Cal.App.3d 381, 391-392; *Dominey v. Department of Personnel Administration* (1988) 205 Cal.App.3d 729, 738, fn. 6). Other documents influenced

the expert advice provided to the Water Authority staff or consultants, who then provided advice to the Water Authority decision makers. For that reason, such documents form part of the underlying factual basis for the Water Authority's decisions relating to the adoption of the Project (see Cal. Pub. Res. Code, § 21167.6, subd. (e)(10); *Browning-Ferris Industries v. City Council of City of San Jose* (1986) 181 Cal.App.3d 852, 866; *Stanislaus Audubon Society, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 153, 155).

II. STATUTORY REQUIREMENT FOR FINDINGS

CEQA (Cal. Pub. Res. Code § 21081), and particularly the CEQA Guidelines (Cal. Code Regs. tit. 14, § 15091), require that:

“No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

- (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.*
- (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.*
- (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.”*

In short, CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to avoid or mitigate significant environmental impacts that would otherwise occur with implementation of the Project. CEQA does not require the implementation of project mitigation or alternatives when such mitigation or alternatives are infeasible or the responsibility for modifying the project lies with another agency. (CEQA Guidelines, Section 15091 (a), (b).)

For those significant effects that cannot be mitigated to a less-than-significant level, the public agency is required to find that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment (see, Cal. Pub. Res. Code § 21081(b)). The CEQA Guidelines state in Section 15093(a) that:

“If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered ‘acceptable.’ ”

III. LEGAL EFFECTS OF FINDINGS

To the extent that these findings conclude that various proposed mitigation measures outlined in the Final PEIR are feasible and have not been modified, superseded, or withdrawn, the Water Authority hereby binds itself to implement these measures. These findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when the Water Authority formally approves the Project.

The mitigation measures and/or the standard design features and construction measures are referenced in the Mitigation Monitoring and Reporting Program (MMRP) adopted concurrently with these findings (see Cal. Pub. Res. Code, § 21081.6, subd. (a)(1)), and will be effectuated through the process of constructing and implementing the Project. The Water Authority will use the MMRP to track compliance with Project mitigation measures. The MMRP will remain available for public review during the compliance period.

IV. EFFECTS DETERMINED TO BE MITIGATED TO LESS-THAN-SIGNIFICANT LEVELS

The Draft and Final PEIR identified several potentially significant environmental effects (or “impacts”) that could result from the Project. However, the Water Authority finds for each of the significant impacts identified that based on substantial evidence in the record, changes or alterations have been incorporated into the Project which avoid or substantially lessen the significant effects (CEQA Guidelines Section 15091), and, thus, that adoption of the mitigation measures set forth below will reduce these significant effects to less-than-significant levels.

A. LAND USE

Thresholds of Significance

For the purposes of the PEIR, the Water Authority established that land use impacts would be significant if the Project would result in:

- Conflicts with sensitive land uses during construction;
- Permanent displacement of existing, developing, or approved urban/industrial buildings or activities over a substantial area (i.e., residential, commercial, industrial, extractive, governmental, or institutional);
- Conflicts with an existing right-of-way;
- Conflicts with any applicable land use plan, zoning ordinance, land use policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects, including applicable HCPs and environmentally sensitive lands; or
- Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. (PEIR, page 4-12)

Impacts and Mitigation Measures

Land Use Impact 1: *Construction of Proposed Project facilities could cause conflicts with sensitive land uses.*

Construction-related activities could have adverse impacts on sensitive land uses, such as residential neighborhoods, schools, hospitals, places of worship, and scientific institutions. These impacts are typically related to dust, noise and disruption of traffic flow and facility access and egress. In some cases, the use of heavy equipment, truck traffic, and construction machinery as well as the closure of traffic lanes or entire roads could disrupt the ability of these sensitive land uses to carry out their necessary functions.

Construction of some of the Proposed Project facilities would require the use of roads serving residential communities. In addition, some projects would be located adjacent to, or in close proximity to, residential neighborhoods. Construction-related fugitive dust emissions, truck

traffic and construction noise have the potential to disrupt the relatively quiet setting of residential land uses and disrupt or delay access and egress to various neighborhoods. Similarly, construction-related traffic and noise have the potential to disrupt the operation of schools, places of worship, and scientific institutions where Proposed Project facilities would be located in close proximity.

Land Use Mitigation Measure 1:

Implement Traffic Mitigation Measures 1 and 2, and Noise Mitigation Measures 1, 2, and 3. (PEIR, pages 4-12 through 4-13)

Land Use Impact 2: *Construction of Proposed Project facilities could result in the permanent displacement of existing, developing, or approved residential, commercial, industrial, extractive, governmental, or institutional land uses.*

In most instances, Proposed Project facilities would be built adjacent to existing Water Authority facilities. Based on preliminary review of the Proposed Project facilities at the program level, no displacements of residences, businesses, extractive, or other established land uses have been identified to date. However, future design considerations could necessitate the displacement of established or approved land uses. Should permanent displacement of an existing or approved land use be required, a significant land use impact would occur.

Land Use Mitigation Measure 2:

- a) For existing land uses that will be displaced by Proposed Project facilities, the Water Authority will compensate property owners for compensable losses in accordance with applicable law at fair market value as determined by certified independent appraisers.
- b) Relocation assistance will be offered to displaced residents and commercial businesses in accordance with applicable law. (PEIR, page 4-14)

Land Use Impact 3: *Construction of Proposed Project facilities could conflict with existing rights-of-way and disrupt utility service.*

Given its geographic extent and regional population, the area where construction of Proposed Project facilities could take place includes numerous existing utilities and linear projects. Construction of various Proposed Project facilities have the potential to conflict with existing utility rights-of-way and linear facilities, such as roads, highways, transmission lines, gas and water pipelines, drainage ditches, and communication lines. In general, Proposed Project facilities would be designed and sited to avoid existing and approved utility rights-of-way to the extent practical.

Land Use Mitigation Measure 3:

- a) The construction contractor will coordinate construction activities with the operator of the affected utility to minimize disruption of service.

- b) Where relocation or modification of existing linear projects or disruption of service will result from Proposed Project construction, the Water Authority will negotiate appropriate remediation consistent with the respective property rights of the parties. (PEIR, page 4-14)

Land Use Impact 4: *Elements of the Proposed Project could be inconsistent with applicable land use plans, zoning ordinances, applicable HCPs or other land use planning objectives.*

While most general plans and zoning ordinances accommodate water infrastructure projects as a matter of policy, implementation of Proposed Project facilities could result in conflicts or inconsistencies with certain general plans and zoning ordinances within the service area. Similarly, certain projects could conflict with MSCP objectives established within the service area or impact areas deemed environmentally sensitive lands within the City of San Diego. In most cases, the projects would be designed and sited to minimize these conflicts and/or inconsistencies.

Land Use Mitigation Measure 4:

While zoning and building ordinances do not apply to the location or construction of facilities used for the production, generation, storage, or transmission of water (see, e.g., 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.

Land uses within the preserve areas are generally very limited, specifically those which are considered compatible with the need to permanently protect natural resources. Necessary public water infrastructure upgrades and new construction along with maintenance and operation activities required by the Water Authority to fulfill its mission statement are consistent with planned uses within the MSCP and MHCP. 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. (PEIR, pages 4-14 through 4-15)

Finding

With the implementation of the mitigation measures identified above and listed in Section 4 of the PEIR and the Mitigation, Monitoring and Reporting Program (MMRP), the Project will not result in significant land use impacts.

B. WATER RESOURCES

Thresholds of Significance

For the purposes of the PEIR, the Water Authority established that impacts to water resources would be considered significant if the following are likely to occur.

- Violation of any water quality standards or waste discharge requirements;
- Alteration of the existing drainage pattern of facility sites and surrounding area in a manner that would increase flood risk or reduce minimum flows downstream of the site;
- Degrade downstream or marine habitats or other biological resources; or
- Place structures within 100-year flood areas. (PEIR, page 5-6)

Impacts and Mitigation Measures

Water Resources Impact 1: *Construction of the Proposed Project facilities could result in degradation of downstream water quality.*

Construction of Proposed Project facilities could result in degradation of downstream water in several ways. Excavation for pump station and treatment plant foundations, pipeline trenches, and pads for FRSs would result in unconsolidated soils and unvegetated surfaces, both subject to erosion and sediment transport into downstream water courses. Bare earth surfaces exposed during construction, and impermeable surfaces that characterize finished facility sites may also accumulate solvents, fuels or other noxious materials that may be transported with stormwater runoff, degrading downstream water quality.

In addition, excavation for project facilities may require removal of groundwater seepage by continuous or intermittent pumping. Discharge of this ‘dewatering’ effluent into nearby drainages may alter existing water runoff patterns, and may affect existing channel configurations. The quantity of water that may be discharged, and the actual point of discharge into adjacent drainages as a result of dewatering operations would be determined as part of final design for each facility, and resulting data would be used in the development of appropriate mitigation measures.

Pipeline segments may also traverse or parallel drainage channels, which may result in temporary drainage alteration as a result of grading and excavation, possibly affecting the direction or velocity of surface flows.

All of these discharges would cause significant but mitigable impacts on downstream water quality and aquatic biological resources.

Water Resources Mitigation Measure 1:

The Water Authority will comply with all applicable water quality regulations:

- a) 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);

- b) File with the RWQCB a *Notice of Intent* to comply with the Statewide General Permit for Construction Activities;
- c) Prepare and implement a project-specific Stormwater Pollution Prevention Plan (including an erosion control plan) if grading or extensive excavation is involved;
- d) Implement a monitoring, inspection, and documentation program to assure the effectiveness of control measures, including post-construction measures;
- e) Obtain or comply with existing General Stormwater Discharge Permit(s) for industrial activities, where applicable;
- f) Comply with the NPDES Phase II Non-Point Discharge Program; and
- g) Implement Geology and Soils Mitigation Measure 4. (PEIR, pages 5-6 through 5-11)

Water Resources Impact 2: *Discharge of effluent during operation of seawater desalination facilities may degrade near shore water quality.*

The constituents of water discharged from seawater desalination plants depend in part on: the desalination technology used; the quality of the intake water; the quality of water produced; and the pretreatment, cleaning, and RO membrane storage methods used.

Some RO plants use a coagulant as part of the pretreatment process to cause particles in intake water to form larger masses that can be more easily removed with filters before the water passes through to the RO membranes. The pretreatment filters are backwashed with filtered seawater every few days, producing a sludge that contains filter coagulant chemicals. Options for disposal of coagulants, particles and sludge removed from the filters include discharge with the brine, transport to a landfill, or a combination thereof. A seawater desalination plant would have to include a process for removal of the particles if they are to be discharged with the sludge.

The desalination of seawater through RO produces a stream of reject brine having twice the salinity of intake water. If the intake water is of oceanic salinity, as is the case for the proposed Encina facility, the reject brine would have a salinity concentration twice that of surrounding waters, which is a level that exceeds regulatory limits, and which may be potentially harmful to marine life. Though most marine organisms can tolerate salinities 20 to 30 percent higher than oceanic, reproduction and growth may be negatively affected. Most organisms will not survive salinities that are twice the seawater concentration.

Furthermore, routine maintenance of RO membranes entails semi-annual cleaning using weak acid and alkaline solutions, and detergent compounds such as dodecylbenzene. If released directly into the ocean, effluent discharge concentrations of these compounds would exceed regulatory limits and could degrade nearshore marine water quality and biological resources.

Water Resources Mitigation Measure 2:

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.

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.

If the seawater desalination facilities in the Proposed Project are operated as described above, there will be no impacts of significance to surface water or marine waters. (PEIR, pages 5-11 through 5-12)

Finding

With the implementation of the mitigation measures identified above and listed in Section 5 of the PEIR and the MMRP, the Project will not result in significant impacts to water resources.

C. BIOLOGICAL RESOURCES

Thresholds of Significance

For purposes of the PEIR the Water Authority established that an impact to biological resources would be considered significant if it would:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS;
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFG or USFWS;
- c) Have a substantial adverse effect on federally-protected wetlands as defined by section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- e) Conflict with local policies protecting biological resources, such as tree preservation policies or ordinances; or
- f) Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State HCP. (PEIR, page 6-19)

Impacts and Mitigation Measures

Biological Resources Impact 1: *Construction of the Proposed Project facilities could result in loss or degradation of various habitats, direct loss of individual special-status species, filling of wetland areas, or increased disturbance or degradation of riparian and/or wildlife habitats.*

Construction, operation and maintenance activities associated with several of the Proposed Project facilities could result in direct impacts to vegetation communities including:

- Direct removal of vegetation through blading/grading including grubbing of shrubs and trees from construction purposes, vehicle access, proposed buildings and facilities footprints, etc.;
- Construction of access roads and/or improvements to segments of the existing access roads;
- Utilization of temporary material construction staging areas in undisturbed areas;
- Compaction of soils that results in loss of vegetative cover;
- Disturbance that results in topsoil loss through wind and soil erosion;
- Removal of shrub/tree riparian habitat within intermittent and perennial stream channels;
- Vehicle access on undisturbed vegetation communities for as-needed maintenance and emergency repairs; and
- Filling or encroachment into wetland buffers.

In addition, general indirect impacts may include, but are not limited to:

- Increased vegetation loss through off-site soil erosion and deposition;
- Soil compaction that impacts vegetative cover through reduced water absorption and infiltration, organic matter accumulation, and increased surface temperatures;
- Introduction and proliferation of noxious weeds;
- Reduction in localized species densities;
- Inhibiting or impacting native species functions including seed production, shade, protection from predators, and plant productivity; and
- Fugitive dust settling/covering on adjacent vegetation.

Construction, operation and maintenance activities associated with several of the Proposed Project facilities could result in direct impacts to wildlife including:

- Provision of new human access into previously undisturbed habitats;
- Mortality by vehicular collision or other human-related activity;
- Impairing essential behavioral activity, such as breeding, feeding, or shelter/refugia;

- Destruction or abandonment of active nest(s);
- Direct loss of occupied or potentially occupiable habitat;
- Disruption of corridors including constriction of points of passage; and
- Permanent habitat loss including loss of foraging, nesting, or burrowing/refuge cover.

In addition, general indirect impacts may include, but are not limited to:

- Displacement of wildlife by construction activities;
- Noise from construction equipment, traffic, pump stations; and
- Increased artificial light from plant lighting, and outdoor lighting around facilities.

Biological Resources Mitigation Measure 1:

The Water Authority will:

- Implement Water Resources Mitigation Measure 1, Air Quality Mitigation Measure 1, and Geology and Soils Mitigation Measures 2 and 4;
- 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;
- Avoid, to the extent practicable through design or site selection, special-status species, important habitats, and wetlands areas;
- Utilize existing Water Authority standard construction specifications (*General Conditions and Standard Specifications*, 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;
- Initiate consultation with the appropriate State or Federal jurisdictional agency if the potential for special-status species disturbance exists following final site selection; and
- Comply with all applicable permit conditions stated in the ACOE Nationwide 12 permit and/or CDFG Section 1600 Streambed Alteration Agreement. (PEIR, pages 6-20 through 6-25)

Biological Resources Impact 2: *Construction of the Proposed Project facilities could result in possible disturbance to marine wildlife resources.*

The high salt concentration of the discharge water and fluctuations in salinity levels resulting from operation of seawater desalination plants may kill sessile organisms near the outfall that cannot tolerate either high salinity levels or fluctuations in the levels. In addition, discharges from seawater desalination plants may be potentially denser than seawater and could sink to the bottom, potentially causing adverse impacts to benthic communities.

Discharge of brine water with high salt concentration may also cause other potential contaminants and particulates to aggregate in particles of different sizes than they would otherwise (CCC 1993). This effect influences rates of sedimentation, and is highly important for determining the effects of benthic organisms that may be buried or burdened by an increase in deposition of unstable and/or finely suspended materials.

Changes in salinity and/or temperature from the brine discharges may also affect migration patterns of fish along the coast. If some fish species sense a change in salinity or temperature, they may avoid the area of the plume and move further offshore. As a result, the fish would be forced to swim a longer distance, they would leave the areas of highest food concentrations, and they would potentially have increased exposure to predators.

Discharges of brine material that result in mortality of marine wildlife resource would be considered a significant impact.

Biological Resources Mitigation Measure 2:

Implement Water Resources Mitigation Measure 2. (PEIR, pages 6-25 through 6-26)

Finding

With the implementation of the mitigation measures identified above and listed in Section 6 of the PEIR and the MMRP, the Project will not result in significant impacts to biological resources.

D. TRAFFIC AND TRANSPORTATION

Thresholds of Significance

For purposes of the PEIR the Water Authority established that an impact to traffic and transportation would be considered significant if:

- Project vehicle trips on area roadways associated with construction or operation activities would result in a long term reduction in existing LOS to levels of D or lower;
- Project construction activities within or adjacent to public roadways would cause unannounced traffic delays of greater than 15 minutes;
- Project vehicle trips or construction activities within or adjacent to roadway rights-of way would create increased risk of motor vehicle accidents or pedestrian injury;
- Project construction activities would result in delays in emergency vehicle response times or require emergency vehicles to use alternate routes during emergency situations; or
- Construction activities would result in unrepaired damage to existing transportation infrastructure. (PEIR, page 7-6)

Impacts and Mitigation Measures

Traffic and Transportation Impact 1: *Construction of the Proposed Project facilities could result in: 1) temporary increases in traffic levels (i.e., existing LOS to levels of D or lower); 2) increased traffic delays; or 3) increased traffic hazards.*

Construction of the Proposed Project facilities could result in increased traffic levels on roadways used to transport equipment, materials, and personnel to construction areas. During facility construction, traffic increases would result from worker commute trips, delivery trucks, and haul trucks. The number of workers at any one site could vary substantially depending upon the type of construction activity and project. In addition, the volume of excavated soil and import backfill, and the number of haul trucks spread over the construction workday would also vary. Future project-level analysis will estimate these truck trips.

New or expanded water pipelines would typically be located in existing streets; therefore, construction could temporarily disrupt traffic flows from lane closures, road closures, or lane blockage. Depending on the available street width, traffic flows may be restricted to one direction during construction. Significant traffic delays could result from such closures/restrictions as well as from increased truck traffic if construction and/or deliveries were to occur during peak traffic periods. In addition, there is a potential for short-term increases in safety hazards to motor vehicles, bicyclists, and pedestrians, and restriction of access to adjacent uses because of the nature of pipeline construction and operation of construction equipment. Pipeline construction could also disrupt or delay transit service if construction occurs along bus routes or light-rail routes. Designated bikeways could also be affected if pipeline routes cross these routes. These potentially significant effects could be mitigated to less than significant through implementation of traffic control measures.

Traffic and Transportation Mitigation Measure 1:

In order to mitigate the potential traffic and circulation impacts of the Proposed Project facilities, the following mitigation measures are recommended and will be considered as appropriate on a project-by-project basis.

- a) 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:
 - Signage posted in areas designated as temporary traffic control zones; and
 - Speed limits to be observed within control zones.
- b) 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.
- c) During construction of water pipelines, the Water Authority shall implement traffic management measures, as deemed necessary and applicable by a properly licensed engineer:

- Temporary traffic lanes shall be marked, barricades and lights shall be provided at excavations and crossings.
 - 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.
 - Pipeline construction shall avoid the morning and evening peak traffic periods to the extent feasible.
 - 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.
 - 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.
 - Private driveways located within construction areas will remain open to maintain access to the maximum extent feasible. It is anticipated that if the 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.
 - 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.
- d) 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.
- e) 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). (PEIR, pages 7-8 through 7-10)

Traffic and Transportation Impact 2: *Construction activities could result in damage to local roadways.*

Construction traffic, especially vehicles used for heavy equipment and materials movement, could exceed the design weight capacities on local roadways, resulting in damage to these roadways during construction. The potential for damage to local roadways is generally more prevalent for rural and local feeder roads, because these roadways are designed for lighter traffic volume and lighter vehicles. Although such activities would not be expected to result in significant damage to most area roadways, the following mitigation measure would ensure that this impact would be less than significant.

Traffic and Transportation Mitigation Measure 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). (PEIR, page 7-10 through 7-11)

Finding

With the implementation of the mitigation measures identified above and listed in Section 7 of the PEIR and the MMRP, the Project will not result in significant traffic and transportation impacts.

E. NOISE

Thresholds of Significance

For purposes of the PEIR, the Water Authority has established that the Project would have a significant effect on the environment if noise generated during construction or operation would:

- Result in a significant increase in noise levels to sensitive receptors in the area; or
- Conflict with applicable noise restrictions or standards imposed by regulatory agencies. (PEIR, page 8-5)

Impacts and Mitigation Measures

Noise Impact 1: *Noise generated during construction of Proposed Project facilities could result in temporary increases in noise levels at sensitive receptors.*

Construction of facilities could generate noise at several local sensitive receptors (e.g., schools, hospitals, day care centers, residential areas) in the area that exceed established criteria or local regulations and codes. The construction-related noise levels would be from, but not necessarily limited to, the use of heavy equipment at the site or vehicles transporting material to or from the construction site.

Pipeline construction would cause localized, temporary short-term increases in noise levels. Actual noise levels resulting from construction activities would vary depending on the type of equipment used, the number of concurrent activities, and the distance to a particular receiver. Normally, nighttime noise levels would not be affected because most work would be limited to daylight hours.

Although construction noise would attenuate with distance from the construction area, the noise resulting from heavy equipment operation would probably be detectable in the general area of the construction site. During the day, the noise would typically combine with noise from traffic and other sources, outside and inside. However, at night when the ambient noise level tends to drop, the same construction noise would be more noticeable.

If construction occurred during the evening or nighttime, the noise impacts would be significantly greater because most local regulations specify lower noise limits during these

periods. In many cases, noise levels during the evening (6:00 p.m. to 10:00 p.m.) receive a 5 dBA penalty, and noise levels at nighttime (10:00 p.m. to 6:00 a.m.) receive a 10 dBA penalty.

Residences or sensitive receptors in the project area would experience elevated noise levels during daytime construction hours. This background noise would be in excess of normal rural background noise which is typically measured between 35 and 45 dBA.

Impacts associated with pipeline construction could persist in one location over a several-week period as the pipeline spreads through the location. Although daytime noise from construction activities would be elevated, the impacts would be temporary. No long-term noise effects would result from the pipeline construction period.

Noise Mitigation Measure 1:

- a) The Water Authority shall ensure that construction activities are conducted consistent with the Water Authority's General Conditions and Standard Specifications, Section 01560 Temporary Controls, including:
 - Comply with all local sound control and noise level rules, regulations, and ordinances which apply to any work performed;
 - 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; and
 - 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.*
- b) 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]).
- c) Some idling of construction equipment will occur; however, equipment shall be turned off when not being utilized.
- d) Noise barriers may be necessary around noisy equipment or near a noise sensitive area if other administrative controls cannot be implemented. (PEIR, pages 8-7 through 8-9)

Noise Impact 2: *Blasting that may be necessary during construction could create a nuisance at local sensitive receptors.*

Although blasting is not anticipated to be necessary for construction of the Proposed Project facilities, it may be required in isolated instances for constructing facilities or along a pipeline route to remove rocks or other hard surfaces.

The sudden and intense airborne noise potential created by a blast could create adverse reactions for nearby sensitive receptors. Additionally, blasting could create local ground vibrations. The character of the blast and ground vibrations would be dependent upon various factors, such as the type of soil/rock, type of explosive, amount of explosive used, depth of explosion and meteorological conditions. Although, under most conditions, ground vibrations would not effect or damage property, it may result in disturbances to sensitive locations.

Blasting operations may use electronics to detonate a charge. This electronic detonation equipment could be impacted from electronic signaling gear operated by residents or by other activities near the Proposed Project site.

Noise Mitigation Measure 2:

The Water Authority shall ensure that all Blasting activities are conducted consistent with the Water Authority's General Conditions and Standard Specifications, Section 02229 Blasting, including:

- Blasting during construction shall only be conducted when other practicable excavation methods are not available.
- 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.
- In the event that blasting is necessary, a Blast Plan shall be developed and approved by the local regulatory authority. (PEIR, page 8-9)

Noise Impact 3: *Noise generated during the operation of Proposed Project facilities could result in increased noise levels at sensitive receptors.*

Operation of any of the Water Authority's facilities may require the use of equipment or machinery (e.g., pumps, motors, compressors, or other equipment) that could generate noise levels over those established or those given in local regulations or codes.

Operation of pipelines would not result in any discernible noise. Noise impacts would be limited to inspection of pipelines during daytime hours and would be temporary.

Noise Mitigation Measure 3:

- a) 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.
- b) 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.

A combination of items (a) and (b) above shall be used to control the noise level to acceptable limits from the equipment or machinery operating at the site. (PEIR, page 8-10)

Finding

With the implementation of the mitigation measures identified above and listed in Section 8 of the PEIR and the MMRP, the Project will not result in significant noise impacts.

F. AIR QUALITY

Thresholds of Significance

For purposes of the PEIR the Water Authority established that the Project would be considered to have significant air quality impacts if it were to:

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors); or
- Expose sensitive receptors to substantial pollutant concentrations. (PEIR, page 9-9)

Impacts and Mitigation Measures

Air Quality Impact 1: *Construction of the Proposed Project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors); or could expose sensitive receptors to substantial pollutant concentrations.*

As described in Section 9.2, the SDAB is presently designated as a non-attainment area for ozone and PM₁₀. During construction of various Proposed Project facilities, vehicles and other construction equipment such as graders, excavators, dozers, scrapers, tractors, water trucks, generator sets, and associated equipment would generate exhaust emissions of CO, NO₂, SO₂, and PM₁₀. Since NO₂ is an ozone precursor, Proposed Project construction activities could contribute to a net increase in ozone concentrations in the region.

PM₁₀ would also be generated in the form of fugitive dust emissions from earth clearing and grading, and vehicle traffic on unpaved surfaces at the project sites and on access roads. Fugitive dust represents the particles of dust generated and introduced into the atmosphere that do not readily fall back to the ground due to their size or mass (including PM₁₀). Although fugitive dust related to construction activities would be temporary in nature, the resulting airborne particulate matter may have a measurable impact on the air quality in the vicinity of the construction area. Fugitive dust emissions would vary depending on the construction schedule, activities being performed at the site, and the site location relative to paved access roads. In addition, soil conditions and meteorological conditions, such as rain and wind, would also influence the creation and dispersion of fugitive dust.

Construction activities associated with the Proposed Project could generate vehicle emissions and fugitive dust that could have an adverse impact on sensitive receptors, such as residential neighborhoods, schools, hospitals, and parks. These construction-related vehicle and fugitive dust emissions would be short-term in nature, however.

Based on these emissions of ozone precursors and fugitive dust, construction activities could contribute to existing non-attainment conditions for ozone and PM₁₀. However, since the Proposed Project construction would be temporary, these impacts on air quality would be short-term in nature.

Long-term operation and maintenance of the Proposed Project would produce minimal emission of ozone precursors or fugitive dust due to occasional operation of emergency generators and sporadic operation and maintenance vehicle trips on unpaved roads and surfaces. These emissions related to operation and maintenance would not result in a considerable cumulative increase in ozone or PM₁₀ levels in the region and would represent a less than significant air quality impact.

Air Quality Mitigation Measure 1:

The following mitigation measure will be implemented during construction of the Proposed Project to reduce exhaust emissions of CO, NO₂, SO₂, and PM₁₀.

- 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.

The following mitigation measures will be implemented to reduce fugitive dust and PM₁₀ emissions:

- Apply water or chemical dust suppressants to unstabilized disturbed areas and/or unpaved roadways in sufficient quantity and frequency to maintain a stabilized surface.
- Water or water-based chemical additives will be used in such quantities to control dust on areas with extensive traffic including unpaved access roads.
- Vehicles hauling dirt or fill will be covered with a tarp or other means. (PEIR, pages 9-10 through 9-11)

Air Quality Impact 2: *Operation of Proposed Project facilities could create objectionable odors affecting sensitive receptors.*

New or expanded WTPs envisioned in the Proposed Project could emit odors as a result of the aeration process due to the presence of algae, microorganisms, sediments, and dissolved gases in the untreated feed water. Odors could be emitted at varying degrees, depending on the rate at which the plants would be operated, and temperature and wind conditions.

Air Quality Mitigation Measure 2:

Design standards would incorporate odor-reducing measures when necessary to reduce odor levels to less than significant levels. (PEIR, page 9-11)

Finding

With the implementation of the mitigation measures identified above and listed in Section 9 of the PEIR and the MMRP, the Project will not result in significant noise impacts.

G. UTILITIES AND PUBLIC SERVICES

Thresholds of Significance

For purposes of the PEIR, the Water Authority has established that Project would be considered to have a significant impact to utilities or public services if it would result in:

- **Interruption in Service** — Interruption or disruption of utility services could occur as a result of physical displacement and subsequent relocation of public utility infrastructure. Such impacts would be considered significant if the result would be a direct long-term service interruption or permanent disruption of essential public utilities;
- **Need for Additional Capacity** — A significant impact would occur if the Proposed Project results in the need for additional capacity of utility infrastructure or additional services, which could not be supplied by existing utility service providers; or
- **Decrease in Level of Service** — A significant impact would occur if operation of the Proposed Project components result in a decrease in existing levels of service in the project area. (PEIR, page 10-7)

Impacts and Mitigation Measures

Utilities and Public Services Impact 1: *Construction of the Proposed Project facilities could require that existing utility infrastructure be relocated. Such relocations could result in long-term interruptions in service.*

The implementation of the Proposed Project includes the construction of new or expanded pipelines, treatment plants, FRSs, and other structures. Many of these projects would occur within areas used by existing utility infrastructure (i.e., water and gas pipelines and electrical transmission lines) belonging to the Water Authority, its member agencies, SDG&E, or other utility service providers. Although project design criteria and some engineering design has been completed, individual engineering design work for all of the Proposed Project elements has not yet occurred. Without design and engineering review to coordinate the project elements with the existing utilities, it is possible that existing utilities could be damaged or require replacement or relocation. If such a disruption of services were to occur, the impact would be considered significant.

Utilities and Public Services Mitigation Measure 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. (PEIR, page 10-8)

Utilities and Public Services Impact 2: *Construction of the Proposed Project facilities could impact school service.*

While there are a number of schools that are within a 1-mile radius of Proposed Project facilities, only a few schools would be directly affected by project construction activities. Where construction activities could occur on or immediately adjacent to school grounds, access and egress and school operations, in general, could be disrupted. This would represent a significant public service impact that would be short-term in nature. Following construction, there would be no impacts to school services due to operation of Proposed Project facilities.

The Proposed Project would result in an increase in construction employment in San Diego County. However, given the size/nature of proposed facilities and the implementation timeline, the construction workforce would likely come from the existing labor pool. Accordingly, the Proposed Project is not expected to appreciably increase the local population nor increase school enrollments. While some workers may move within the County and change school districts, these changes would result in a less than significant impact on schools.

Utilities and Public Services Mitigation Measure 2:

Impacts to schools related to construction activity shall be mitigated as follows:

- a) Implement Traffic and Transportation Mitigation Measure 1.
- b) Potentially disruptive construction activities may be scheduled when the schools are not in session. (PEIR, pages 10-8 through 10-9)

Finding

With the implementation of the mitigation measures identified above and listed in Section 10 of the PEIR and the MMRP, the Project will not result in significant impacts on utilities and public services.

H. AESTHETICS

Thresholds of Significance

For purposes of the PEIR, the Water Authority established that thresholds that the Project would be considered to have significant aesthetic impacts if the Project were to:

- Have a substantial adverse effect on scenic vistas or substantially degrade the existing visual character or quality of the project sites and their surroundings;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; and
- Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. (PEIR, page 11-3)

Impacts and Mitigation Measures

Aesthetics Impact 1: *Permanent structures in the Proposed Project could have an adverse impact on scenic vistas or substantially degrade the existing visual character or quality of the project sites and their surroundings.*

The visual contrast that would be created by the Proposed Project facilities varies by type of project. Pipelines would be buried and would not be visible to observers once the disturbed pipeline corridors are resurfaced or revegetated. Other facilities, such as FRSs and FCFs, would be primarily buried with only a small portion of the facility visible on the surface. Alternatively, treatment plants, treatment plant expansions, the seawater desalination facility, and pump stations are more visible facilities that would be built on the surface. These facilities would have a more conspicuous and industrial appearance and would generally degrade the visual quality of an area to a larger extent than buried and partially buried facilities.

Another important consideration, however, is whether the projects would be constructed in relatively undisturbed settings versus adjacent to existing facilities. The majority of treatment plant projects, for instance, would constitute expansion of existing facilities. The expansion of treatment capacity would simply increase the size and visibility of existing facilities, rather than place new facilities with industrial appearances in relatively undisturbed natural settings. In general, where projects would be constructed adjacent to existing facilities, the resulting visual contrast with the surrounding setting would likely be less than significant. Other projects would be located in relatively undisturbed natural settings or residential areas, which would result in greater visual contrasts and potentially significant aesthetic impacts.

Where new facilities are proposed that would be visible from scenic vistas, sensitive viewpoints, or would occur in visually sensitive areas, these projects could result in significant aesthetic impacts. Examples of these types of projects include those proposed within parks, vacant land, or open space areas in locations that are otherwise natural and generally undisturbed. Proposed Project components that would be visible from highly traveled roads or would be visible on prominent hills or landmarks would have significant aesthetic impacts unless adequate mitigation measures were implemented.

Aesthetics Mitigation Measure 1:

- a) 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.

- b) Design elements of the facility will incorporate surrounding architecture and topographical features and blend with the surrounding vegetation and colors.
- c) 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.
- d) Landscaping and/or fencing that screens project facilities from the view of adjacent residences and roads could also reduce the severity of aesthetic impacts.

Implementation of these mitigation measures will likely reduce this type of aesthetic impact to less than significant levels. However, the site-specific CEQA review will evaluate those measures and determine if more detailed mitigation measures are required. (PEIR, pages 11-4 through 11-5)

Aesthetics Impact 2: *Proposed Project facilities could substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway corridor.*

In general, the Proposed Project would be built adjacent to existing water supply facilities, such as WTPs, dams and reservoirs, and pipeline routes. Based on preliminary review of Proposed Project facilities at the program level, no aesthetic impacts to scenic resources or designated scenic highways would occur. However, SR 52 just north of MTRP has been determined to be eligible for scenic highway designation. Similarly, I-15 from SR 76 north to the Riverside County line is also eligible for scenic highway designation. Should these roads become designated scenic highways, various Proposed Project facilities would be subject to applicable scenic corridor protection programs intended to preserve the scenic qualities of those highway corridors.

Since the specific location and design of Proposed Project facilities have yet to be determined, it is possible that adverse impacts to scenic resources could occur as a result of one or more projects. More detailed evaluations of the visual impacts of specific projects may be required as part of the site-specific CEQA review.

Aesthetics Mitigation Measure 2:

- a) 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.
- b) 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.
- c) 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.

Mitigation of impacts to historic resources is discussed Section J, Cultural Resources, below. (PEIR, page 11-6)

Aesthetics Impact 3: *Proposed Project facilities could create new sources of light or glare that would adversely affect day or nighttime views in surrounding areas.*

Various types of Proposed Project facilities would require night lighting for worker safety and security reasons. These facilities would include WTPs, FRSSs, pump stations, and the seawater desalination facility.

Proposed Project facilities could add to existing light and glare if constructed adjacent to existing water supply facilities and in urban areas, although this additional light may be insignificant in magnitude. Where projects would be sited in less-developed rural or park areas, the addition of light and glare has the potential to have significant adverse aesthetic impacts.

Aesthetics Mitigation Measure 3:

- a) 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.
- b) To reduce daytime glare, concrete or metal surfaces and structures will be constructed with materials that minimize reflection of light or sunshine. (PEIR, pages 11-6 through 11-7)

Aesthetics Impact 4: *Construction-related ground disturbance would result in short-term aesthetic effects.*

Construction of the various projects of the Proposed Project will require removal of vegetation, grading, and surfacing. This ground disturbance will have a short-term aesthetic impact as this disturbance will visually contrast with adjacent undisturbed areas. Since these disturbed areas will be revegetated or in some cases landscaped, the short-term nature of this effect is considered to be less than significant.

Aesthetics Mitigation Measure 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). Since these disturbed areas will be revegetated or in some cases landscaped, the short-term nature of this effect is considered to be less than significant. (PEIR, page 11-7)

Finding

With the implementation of the mitigation measures identified above and listed in Section 11 of the PEIR and the MMRP, the Project will not result in significant aesthetic impacts.

I. GEOLOGY AND SOILS

Thresholds of Significance

For purposes of the PEIR, the Water Authority has established that geology and soils-related impacts would be considered significant if the Project would:

- Expose people or structures to potential substantial adverse effects, including the risk of injury, or death involving surface fault rupture, earthquake ground shaking, liquefaction, subsidence, expansive soils, mass wasting, erosion and tsunami or seiche;
- Situate structures on a geologic unit or soil that is unstable, or that could become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Result in substantial soil erosion or the loss of topsoil; or
- Are located on expansive soil. (PEIR, page 12-22)

Impacts and Mitigation Measures

Geology and Soils Impact 1: *Seismic activity in the project area could expose humans to the risk of injury or death and could cause damage to Proposed Project facilities.*

Proposed facilities would be subject to earthquakes that could damage facilities and affect reliable use of pipelines. Primary earthquake hazards include damage from ground displacement along a fault zone, severe ground shaking, and induced secondary hazards such as liquefaction, rapid differential settlement, lurching, landslides, and rockfalls. Most earthquake-related hazards could be mitigated by engineering design or avoidance of high hazard areas. In general, the most severe hazard is probably posed by landslides and soil erosion in steep terrain.

Implementation of mitigation measures would be required as presented below, and would reduce this impact to less than significant.

Geology and Soils Mitigation Measure 1:

- a) To reduce the hazards of seismic damage, project sites will not be located within obvious fault zones, if possible. No projects are near any known Holocene (within the last 10,000 years) faults, but fault movement often occurs on previously unknown or “inactive” faults throughout the State. 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.

- b) 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 National Electrical Safety Code (American National Standards Institute [ANSI] C.2) and the UBC. (PEIR, pages 12-23 through 12-24)

Geology and Soils Impact 2: *Shrink and swell actions of expansive soils could damage project structures or foundations.*

Foundations and structures associated with project facilities would generally extend below the 4-foot zone, which would not be affected by expansive soils (i.e., soils with high shrink/swell potential). However, some structures could be significantly affected by the presence of expansive soils. Geotechnical studies prepared for the Proposed Project would identify areas of expansive soils. Implementation of the following mitigation measure would ensure that construction on expansive soils would result in a less than significant impact.

Geology and Soils Mitigation Measure 2:

The Water Authority shall ensure that the construction contractor complies with the Water Authority's General Conditions and Standard Specifications, Section 02200 Earthwork. This section includes the requirements for excavation, trenching, backfilling, compaction and grading necessary for the construction of new facilities. (PEIR, page 12-24)

Geology and Soils Impact 3: *Ground disturbance and vegetation removal during construction could result in increased soils erosion.*

Construction of the Proposed Project could result in surface disturbances and removal of vegetation along the pipeline corridor leading to increased soil erosion. Sedimentation into streams and water bodies would likely increase if disturbed soils were left exposed during winter, early spring, and summer storm events (periods of high precipitation, runoff, and winds). Erosion potential is generally more severe on steep, sparsely vegetated slopes; fine sandy or silty soils; and in loose sandy soils where strong winds occur. Erosion potential is also elevated in recently burned areas if such areas remain largely unvegetated, especially in areas with previously existing high erosion potential. Soil erosion is expected to be minimal following successful reclamation of disturbed areas. Because the areas where erosion may be increased are narrow and spread over a large area, this impact would be less than significant. However, the following mitigation measure would serve to further reduce erosion impacts.

Geology and Soils Mitigation Measure 3:

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.

- a) The Erosion Control Plan will include, but not be limited to:
- Confine all vehicular traffic associated with construction to designated rights-of-way, material yards, and access roads;
 - Limit disturbance of soils and vegetation removal to the minimum area necessary for access and construction;
 - Where vegetation removal is necessary, use cutting/mowing methods instead of blading, wherever possible;
 - Graded material will be sloped and bermed, where possible, to reduce surface water flows across the graded area;
 - Use detention basins, certified weed-free straw bales, or silt fences, where appropriate; and
 - 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.
- b) Implement Water Resources Mitigation Measure 1. (PEIR, pages 12-24 through 12-25)

Finding

With the implementation of the mitigation measures identified above and listed in Section 12 of the PEIR and the MMRP, the Project will not result in significant geologic or soil resource-related impacts.

J. CULTURAL RESOURCES

Thresholds of Significance

Archeological Resources

For purposes of the PEIR, the Water Authority has established that the Project could have a significant effect on the environment if it would cause a substantial adverse change in the significance of an archaeological resource or disturb any human remains. Pursuant to Section 15064.5 of the CEQA Guidelines, archaeological resources, not otherwise determined to be historical resources, may be significant if they are unique. Pursuant to PRC Section 21083.2, a unique archaeological resource is defined as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets one of the following criteria:

- Contains information needed to answer important scientific questions and there is a demonstrable public interest in that information;
- Has a special and particular quality, such as being the oldest of its type or the best available example of its type; or

- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

According to Section 15064.5 of the CEQA *Guidelines*, all human remains are significant.

A non-unique archaeological resource means an archaeological artifact, object, or site that does not meet the above criteria. Non-unique archaeological resources do not receive further consideration under CEQA.

Historic Resources

Section 15065 of the CEQA Guidelines mandates a finding of significance if a project would eliminate important examples of major periods of California history or pre-history.

In addition, pursuant to Section 15064.5 of the CEQA Guidelines, a project could have a significant effect on the environment if it “may cause a substantial adverse change in the significance of an historical resource.” A “substantial adverse change” means “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource is impaired.” Material impairment means altering “in an adverse manner those characteristics of an historical resource that convey its historical significance and its eligibility for inclusion in the California Register of Historical Resources (CRHR).”

Pursuant to Section 15064.5 of the CEQA Guidelines, an historical resource (including both built environment and prehistoric archaeological resources) is presumed significant if it is listed on the CRHR or has been determined to be eligible for listing by the State Historical Resources Commission. A historical resource may also be considered significant if the lead agency determines, based on substantial evidence, that the resource meets the criteria for inclusion in the CRHR. Any resource that is listed on, or considered eligible for inclusion on, the National Register of Historic Places is automatically considered eligible for the CRHR. (PEIR, pages 13-7 through 13-8)

Impacts and Mitigation Measures

Cultural Resources Impact 1: *Construction of the Proposed Project facilities could affect cultural resources.*

Ground disturbance associated with the construction of new facilities could disturb or destroy important cultural resources.

Potential impacts to cultural resources would be mitigated to less than significant by implementing the following mitigation measures.

Cultural Resources Mitigation Measure 1:

- a) 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.

- b) 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.
- c) 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.
- d) In the event that unanticipated cultural resources are encountered during Proposed Project construction, all earthmoving activity shall cease until the qualified archaeologist examines the findings, assesses their significance, and offers 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.

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 reinternment 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. Any collections of artifacts resulting from the surveys and monitoring, as well as the associated records, shall be curated at an appropriate institution in San Diego County that meets the standards of the State of California Guidelines for the Curation of Archaeological Collections. (PEIR, pages 13-8 through 13-9).

Finding

With the implementation of the mitigation measures identified above and listed in Section 13 of the PEIR and the MMRP, the Project will not result in significant impacts to cultural resources.

K. PUBLIC SAFETY AND HAZARDOUS MATERIALS

Thresholds of Significance

For purposes of the PEIR, the Water Authority established that the Project was considered to have a significant public safety or hazardous materials impacts if construction and or operation would:

- Create a substantial public health hazard due to dam, pipeline, or water facility failure and resulting flood;
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands;

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Expose project construction workers or the public to existing hazardous materials present at project sites, including the possible exposure to unexploded ordnances; or
- Leave Proposed Project facilities vulnerable to potential acts of vandalism or facility sabotage. (PEIR, pages 14-4 through 14-5)

Impacts and Mitigation Measures

Public Safety and Hazardous Materials Impact 1: *Activities associated with construction, operation and maintenance of the Proposed Project could increase the potential for accidental wildfires.*

Construction, operation, and maintenance of Proposed Project facilities could increase the potential for wildfires in the service area. Workers smoking cigarettes, sparks from equipment, welding, or other activities could increase potential for fire ignition. Large portions of the service area feature suburban residential areas bordered by undeveloped ridges covered with grass, chaparral, and woodland vegetation that is highly susceptible to wildfires. The potential for project-related fire hazards could result in significant impacts unless they are mitigated through implementation of the following mitigation measures. (PEIR, page 14-6)

Public Safety and Hazardous Materials Mitigation Measure 1:

- a) Prior to construction, develop and implement (in consultation with the Fire Marshal) a Fire Prevention Program for each facility, as necessary.
- b) Develop an 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.

Public Safety and Hazardous Materials Impact 2: *Transportation, use, or disposal of hazardous materials during construction, operation and maintenance of the Proposed Project or upsets and accidental releases of hazardous materials would create the potential for exposure of workers, the public, and the environment.*

Transportation, use, or disposal of hazardous materials during Proposed Project construction, operation, and maintenance would pose potential health and safety hazards to construction and maintenance workers, nearby residents, and the environment. These impacts would be associated with the potential for spills and improper disposal. However, through proper construction, maintenance and monitoring in accordance with the Water Authority's General Conditions and Standard Specifications (SDCWA 1999), and proper disposal, it is anticipated that the risk of upsets, including accidental explosions or releases of hazardous substances and associated health hazards, would be less than significant.

Many of the WTPs in the service area utilize chlorine gas in the disinfection stage of the treatment process. The addition of chlorine kills any pathogenic microscopic life that may be present in the water, such as bacteria or viruses. Prior to water leaving the treatment plant, small amounts of ammonia are typically added to the chlorine to form chloramine, a more stable disinfectant that lasts longer in the distribution system (Sweetwater Authority 2003). The storage of compressed chlorine gas and ammonia at treatment plant sites includes the risk of unintentional releases of chlorine gas or ammonia and exposure to adjacent populated areas.

Public Safety and Hazardous Materials Mitigation Measure 2:

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; and
- c) Coordination and pre-emergency planning with the LEPCs and the surrounding communities. (PEIR, pages 14-6 through 14-7)

Public Safety and Hazardous Materials Impact 3: *During construction of the Proposed Project facilities, workers and the public could be exposed to existing hazardous materials present at Proposed Project sites, including the possible exposure to unexploded ordnance.*

A number of the Proposed Project facilities would be constructed in areas that have been developed or have in the past been used as part of a military gunnery range. For those projects, site specific surveys, conducted as part of normal pre-construction due diligence, would be required to identify potential sites that may have hazardous materials present in the soil. Based on the results of these surveys, appropriate measures to avoid exposure would be included in the construction plans.

In addition, some of the Proposed Project facilities would occur in an area that has been identified as potentially having unexploded ordnances present (MTRP). Without additional site specific surveys for unexploded ordnances, there is a potentially significant impact associated with the exposure of workers to unexploded ordnances. This potentially significant impact could be mitigated through implementation of the following mitigation measure.

Public Safety and Hazardous Materials Mitigation Measure 3:

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:

- 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.
- 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.
- 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.

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. (PEIR, pages 14-7 through 14-8)

Public Safety and Hazardous Materials Impact 4: *Proposed Project facilities could be vulnerable to acts of vandalism and sabotage.*

The Water Authority operates a wide variety of water supply facilities within the service area, including aqueducts, pipelines, pump stations, FRSs, and storage tanks and reservoirs. Public facilities such as these can be the target of acts of vandalism or even sabotage. Vandalism could range from graffiti to damage to fencing and facility lighting, to more serious acts that damage or destroy equipment and facilities. Given the critical nature of the Water Authority's water supply facilities, and ongoing concerns about security, the potential for sabotage of Water Authority water supply facilities and contamination of public water supplies is an important public safety issue that must be considered. Without adequate design features related to security, the potential for significant vandalism and/or sabotage could result in significant impacts to public health and safety.

Public Safety and Hazardous Materials Mitigation Measure 4:

Critical unmanned facilities will be equipped with appropriate security features to prevent unauthorized entry, as necessary. (PEIR, page 14-8)

Public Safety and Hazardous Materials Impact 5: *The presence of Proposed Project facilities at lakes, reservoirs, parks, and open space areas could create potential risks to recreational users of these areas due to construction activities, potential vehicle accidents involving Water Authority operation and maintenance vehicles, and unauthorized public access to Water Authority facilities.*

Construction of Proposed Project facilities at or near recreation sites could create hazards for area visitors. Operation and maintenance activities would necessitate the use of vehicles to access Proposed Project facilities within various recreational and open space areas. Certain types of water supply facilities can represent an attractive nuisance to members of the public visiting lakes, reservoirs, parks, and open space areas.

Public Safety and Hazardous Materials Mitigation Measure 5:

- a) 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.
- b) 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.
- c) 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. (PEIR, pages 14-8 through 14-9)

Finding

With the implementation of the mitigation measures identified above and listed in Section 14 of the PEIR and the MMRP, the Project will not result in significant public safety impacts or impacts related to use of hazardous materials.

L. PAEONTOLOGICAL RESOURCES

Thresholds of Significance

For purposes of the PEIR, the Water Authority has established that the Project would result in significant paleontological impacts if it were to:

- Directly or indirectly destroy a unique paleontological resource or site.

Additionally, based on the City of San Diego Significance Determination Guidelines Under CEQA, impacts to paleontological resources are considered significant if the proposed project:

- Grades more than 2,000 cubic yards at a depth greater than 10 feet in “moderately sensitive” geologic formations known to contain paleontological resources.

Impacts and Mitigation Measures

Paleontological Resources Impact 1: *Construction of the Proposed Project could directly or indirectly destroy unique paleontological resources or sites due to site grading or other ground disturbing activities.*

Of the various Proposed Project facilities, there is the potential that some would be constructed on sites featuring moderate- or high-sensitivity geologic formations that could bear unique paleontological resources. In the absence of mitigation, Proposed Project-related excavations in moderate- and high-sensitivity geologic formations could result in significant adverse paleontological resource impacts.

Paleontological Mitigation Measure 1:

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.

- Existing bedrock outcrops and (possibly) excavation of test trenches will be inspected for fossil remains;
- 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;
- 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;
- Laboratory preparation of collected fossil remains will be conducted for potentially significant or unique finds;
- Prepared significant or unique fossil remains will be cataloged and identified;
- Cataloged fossil remains will be transferred for storage to an accredited institution; and
- 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. (PEIR, page 15-7)

Finding

With the implementation of the mitigation measure identified above and listed in Section 15 of the PEIR and the MMRP, the Project will not result in significant impacts to paleontological resources.

M. AGRICULTURAL RESOURCES

Thresholds of Significance

For purposes of the PEIR, the Water Authority has established that the Project would result in a significant impact to agricultural resources if it resulted in:

- Conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, or Grazing Land as shown on the maps prepared pursuant to the FPPA and the Farmland Mapping and Monitoring Program of the California Department of Conservation to non-agricultural use;
- Conflict with a Williamson Act contract;
- Changes in the existing environment, which due to their location or nature, could individually or cumulatively result in substantial loss of farmland to non-agricultural use;
- An adverse affect on the quantity or quality of water used for agricultural production;
- Substantially impair the productivity of adjacent agricultural areas; or
- Result in the introduction of or a substantial increase in pests and/or disease in nearby agricultural areas. (PEIR, page 16-7)

Impacts and Mitigation Measures

Agricultural Resources Impact 1: *Conversion of Farmland of Local Importance and Grazing Land as shown on the maps prepared pursuant to the FPPA and the Farmland Mapping and Monitoring Program of the CDC to non-agricultural use could occur.*

Construction of the Proposed Project facilities could result in loss of Farmland of Local Importance or Grazing Land. Proposed facilities would be sited near existing facilities, where practicable, and, therefore, in previously disturbed areas. Some disturbance and/or loss of agricultural land could occur, however, in areas where facilities would be built on previously undisturbed land. In order to mitigate the potential significant adverse impact, the following mitigation measures are recommended.

Agricultural Resources Mitigation Measure 1:

- a) Avoidance of construction on agricultural land where feasible;
- b) If possible, schedule construction during periods of non-production; and
- c) Compensate land owner for loss of land and/or production. (PEIR, pages 16-7 through 16-8)

Finding

With the implementation of the mitigation measure identified above and listed in Section 16 of the PEIR and the MMRP, the Project will not result in significant impacts to agricultural resources.

N. RECREATION

Thresholds of Significance

For purposes of the PEIR, the Water Authority established that the Project would have significant adverse impacts on recreational resources if it were to result in:

- Direct disturbance or displacement of established recreation facilities; or
- The construction or expansion of recreational facilities that might have an adverse physical effect on the environment. (PEIR, page 17-5)

Impacts and Mitigation Measures

Recreation Impact 1: *The Proposed Project could result in direct disturbance or displacement of established recreation facilities.*

In general, Proposed Project facilities would be built adjacent to existing water supply facilities, such as WTPs, and existing pipeline routes. These projects would typically avoid recreational areas open to the public. However, in some cases, Proposed Project facilities would require the disturbance, displacement, and/or inundation of established recreational facilities or features. The potentially significant effects could be mitigated to less than significant through implementation of the following mitigation.

Recreation Mitigation Measure 1:

- a) 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;
- b) 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;
- c) 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. (PEIR, pages 17-5 through 17-6)

Recreation Impact 2: *During construction of the Proposed Project facilities, construction activities could result in the disruption of existing recreational activities.*

The temporary loss of existing recreational uses could affect recreational activities such as boating, fishing, water skiing, hiking, picnicking and the recreation-related concession. Disruptions could last longer than one year; this loss would result in a significant but mitigable recreational impact. The potential increase in recreational activities at other recreational parks could result in temporary significant but mitigable impacts if those parks do not have sufficient capacity.

Recreation Mitigation Measure 2:

Affected public agencies will be compensated for possible loss of business revenue from disruption of recreational activities during construction. (PEIR, page 17-6)

Recreation Impact 3: *Operation of the Proposed Project facilities could result in the reduction of recreation quality.*

Recreation Mitigation Measure 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. (PEIR, page 17-6)

Finding

With the implementation of the mitigation measures identified above and listed in Section 17 of the PEIR and the MMRP, the Project will not result in significant impacts to recreational resources.

V. EFFECTS DETERMINED TO BE NOT SIGNIFICANT OR TO BE LESS-THAN-SIGNIFICANT

The Water Authority finds that, based upon substantial evidence in the record, as discussed below, the following impacts associated with the Project are less than significant and no mitigation is required.

A. LAND USE

Once constructed, operation and maintenance of Proposed Project facilities would not conflict with existing or planned land uses within the Water Authority's service area. (PEIR, page 4-17.)

B. WATER RESOURCES

Potential increases or decreases to the recharge of the aquifers at and downstream of project components could result from construction or operation of the Proposed Project facilities.

Construction and operation of Proposed Project facilities is not expected to cause any impact of significance to groundwater resources. Temporary groundwater withdrawals caused by the need to dewater treatment plant and pipeline excavations would be localized, small scale and of short duration. This impact is found not to be significant.

Changes in the water quality at the San Vicente Reservoir could occur as a result of drawdown during the dam raise period of construction.

The potential effects of drawdown in the San Vicente Reservoir were examined in the EIR for the ESP (SDCWA 1995). As reported in the 1995 study, effects on San Vicente water quality and recreational fisheries will not be impacted as a result of reservoir drawdown as proposed under the ESP. Incremental effects on these same resources from the dam raise proposed under the Proposed Project are not expected to increase the significance of impacts evaluated under the ESP EIR.

Construction of Proposed Project facilities in floodplains may impede or redirect flood flows, and may decrease the safety of structures and people.

There would be no construction of Proposed Project facilities within 100-year floodplain zones. This impact is accordingly not significant. (PEIR, pages 5-12 through 5-13)

C. TRAFFIC AND TRANSPORTATION

Operation of the Proposed Project facilities (see Table 2-1) could result in: 1) temporary increases in traffic levels (i.e., existing LOS to levels of D or lower); 2) increased traffic delays; and 3) increased traffic hazards.

Long-term traffic increases would be limited to traffic associated with new personnel and increased deliveries of supplies to specific Proposed Project facilities (i.e., the new or expanded WTPs and seawater desalination facilities). Based on similar projects, there could be a possible maximum increase of 40 round trips per day associated with project operations at any given location, spread to some extent throughout a 24-hour day. A total of 40 round trips per day is small relative to traffic conditions at any of the proposed locations; therefore, traffic impacts associated with project operations would not lower the LOS on roadways or at intersections. Therefore, operational traffic impacts would be less than significant. (PEIR, page 7-10)

D. UTILITIES AND PUBLIC SERVICES

Implementation of the Proposed Project could result in Impacts to Police Service.

While new construction would increase the number of facilities within a given police patrol area, this would not result in any increase in police or sheriff patrol efforts, or require additional patrol officers. The Proposed Project would not result in an increase in response time. Since the Proposed Project would not result in a change in the level of police service, the impacts from implementation would be less than significant.

Implementation of the Proposed Project could result in Impacts to Fire Protection Services.

While new construction would increase the number of facilities within a given fire protection area/district, this would not result in any increase in fire protection efforts. The Proposed Project will not result in an increase in response time. Since the Proposed Project would not result in a change in the level of fire protection service, the impacts from implementation would be less than significant.

Construction of the Proposed Project facilities could require that additional utility infrastructure be built to accommodate the new facilities and/or could decrease the existing levels of service for utility customers.

The Proposed Project would increase the demand for electric and natural gas utility services. Various Proposed Project facilities would require electric power and modest amounts of natural gas for operation. It is anticipated, however, that utility providers would plan ahead and forecast future utility demands in the region as a whole and expand their capacity to meet future needs and provide adequate levels of service. Therefore, impacts would be less than significant. (PEIR, page 10-9)

E. GEOLOGY AND SOILS

Operation of Proposed Project facilities could result in subsidence.

Groundwater would not be pumped for any projects, except for short-term dewatering purposes, and most aquifers in the study area are not thick enough for subsidence to be an issue. Most alluvial basins in the project area have insufficient thickness or volumes of silt and clay to be highly vulnerable to subsidence due to dewatering. Therefore, the risk of subsidence at project sites is considered to be negligible.

Construction and operation of Proposed Project facilities near the ocean could expose facilities to the potential risk of tsunami.

The seawater desalination plant would be situated on the coast and would, therefore, be at some risk from tsunami. The plant would be designed with best management practices to reduce potential damage from this hazard.

An apparent landslide block 1.25 miles wide and 0.5 to 0.7 mile long was mapped along the northwest side of San Vicente Reservoir (Woodward-Clyde Consultants 1991; James M. Montgomery Consulting Engineers, Inc. 1992). The interpretation of this slide is uncertain and it may actually be intact bedrock (SDCWA 1995). A sudden, catastrophic slippage of this block could theoretically generate a tsunami-like wave in the reservoir, but this is considered highly unlikely within a reasonable timeframe and potential impact is considered to be negligible. Other projects are too far inland or at too great an elevation to be at risk from tsunami.

Implementation of the Proposed Project could prevent future access to geologic features and resources of economic or scientific value.

Impacts to mines or mineral resources would be considered significant if construction, operation, or maintenance of a project would prevent or disrupt development of mineral resources. Some projects could be close enough to active mining operations that construction activities may have some impact on traffic to and from the mining operation. Proper coordination and scheduling of construction activities would mitigate this potential impact.

Projects proposed in the Proposed Project could be at risk of seiche from a seismic event.

The only project that might be at risk from seismic seiche is the San Vicente Reservoir project. This project is not near any major faults known to be active; therefore, risk from seiche is considered to be negligible. (PEIR, pages 12-25 through 12-26)

F. CULTURAL RESOURCES

Operation of the Proposed Project facilities could result in adverse effects to cultural resources.

Ground disturbing activities would be limited primarily to construction activities associated with the Proposed Project. Based on similar facilities, further impact to cultural resources during operation of facilities is unlikely or insignificant. Operational impacts to cultural resources would be less than significant. (PEIR, page 13-9)

G. PUBLIC SAFETY AND HAZARDOUS MATERIALS

Implementation of Proposed Project facilities could interfere with adopted ERPs or EREPs.

Construction and operation of Proposed Project facilities would not interfere with adopted ERP/EREPs within the service area. Reservoir expansion projects could require amendment of existing ERP/EREPs, but once they are amended and adopted, these projects would not interfere with their implementation in the event of an emergency.

Construction and operation of Proposed Project facilities could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.

None of the Proposed Project facilities would result in the emission of hazardous air pollutants, acutely hazardous materials, substances or wastes within 0.25 mile of an existing or proposed school. Construction activities requiring the use of vehicle-related fuels and lubricants would occur within close proximity of schools for various Proposed Project facilities. Construction activity near schools would be short-term in nature and the potential for accidental spills or releases of these hazardous materials and related risks to schools during construction is very low. (PEIR, page 14-9).

H. PALEONTOLOGICAL RESOURCES

Operation of the Proposed Project facilities could have an effect on paleontological resources.

Effects on paleontological resources could occur in the initial construction stages of Proposed Project facilities only. Once construction is completed and the facilities are operational, there would be no further disturbance of fossil bearing formations and no additional significant effects on paleontological resources. (PEIR, page 15-7)

I. AGRICULTURAL RESOURCES

The Proposed Project could conflict with a Williamson Act contract.

Lands that are covered under the Williamson Act are updated on an annual basis. If the land owner chooses to file a “notice of non-renewal” the land is removed from the coverage under the Act. Land that is currently covered under the Williamson Act in the vicinity of Proposed Project areas may not be covered by the time a facility is actually built. A land owner could choose to remove the land from coverage to allow construction of a proposed facility, therefore, this effect is found not to be significant.

Proposed Project facility construction and operation could cause changes in the existing environment, which due to their location or nature, could individually or cumulatively result in substantial loss of farmland to non-agricultural use.

Most of the Proposed Project facilities would be sited on or near existing facilities and, therefore, on previously disturbed land. Land would be converted back to its former state to the extent feasible after construction activities are completed. Therefore, any conversion of agricultural land is not anticipated to be a significant impact.

Construction activities associated with the Proposed Project could adversely affect the quantity or quality of water used for agricultural production.

Construction activities could have a brief effect on the availability of water for agricultural uses in some areas, but this is not likely. If water service interruption were to occur it would be of very short duration and would not cause a significant adverse impact to water used for agricultural production.

Construction and operation activities associated with the Proposed Project could impair the productivity of the adjacent agricultural areas.

Fugitive dust from construction activity could float into nearby agricultural fields. If this occurs, it is expected to be temporary and not expected to cause a significant impact to the productivity of adjacent agricultural land.

Activities associated with the Proposed Project could result in the introduction of/or a substantial increase in pests and/or disease in nearby agricultural areas.

Ground disturbance during digging, trenching, and removing vegetation could provide an opportunity for non-native pest plants and/or noxious weeds to take root near the Proposed Project facilities. Most of these disturbances would be within facility boundaries and not within agricultural land areas. If agricultural land is disturbed during construction, it will be returned to its former state as much as practicable after construction is complete. Therefore, introduction of pests and/or disease is not expected to be a significant impact. (PEIR, pages 16-8 through 16-9)

J. RECREATION

Construction-related ground disturbance and traffic could restrict or delay access to established recreational resources.

In some cases, the Proposed Project could necessitate the closure or partial closure of roads used to access parks, lakes and reservoirs, and designated open space areas used for recreation. Similarly, truck traffic could increase traffic congestion and/or degrade road conditions to recreation sites and delay access to those resources. Following the completion of construction, roads would be restored to their previous condition, and no permanent access-related impacts to these recreation resources would occur. Since these access-related impacts would be short-term in nature and would cease following the end of construction, these impacts would be less than significant.

Construction-related dust and noise associated with the Proposed Project could adversely impact recreational use of various parks and open space areas in the service area.

The construction of various components of the Proposed Project could generate dust and noise that would constitute a temporary nuisance to some recreational users of nearby parks and open space areas in the service area. Since these impacts to recreational uses would be temporary in nature and dust and noise impacts would be mitigated to the extent practical, temporary construction impacts to recreation would be less than significant. Mitigation measures related to dust control are described in more detail in Section 9, Air Quality. Mitigation measures related to construction noise are described in Section 8, Noise.

Construction or operation of Proposed Project facilities could result in increased use of existing neighborhood and regional parks such that substantial physical deterioration of the facility could occur or be accelerated.

None of the Proposed Project facilities would directly increase the use of existing neighborhood or regional parks. Since the Proposed Project calls for the improvement of regional water supply infrastructure and would not result in an increase in population, the use of service area lakes and reservoirs is not expected to increase as a result of the Proposed Project. Accordingly, the Proposed Project would not result in substantial deterioration of existing neighborhood parks. (PEIR, pages 17-6 through 17-7)