SECTION 7 TRAFFIC AND TRANSPORTATION

This section presents the potential adverse impacts of the Water Authority's Proposed Project on local and regional transportation systems. These potential effects include any necessary modifications to the transportation system and increases in traffic from construction or operation of the Water Authority's Proposed Project facilities. This section begins with a description of the regional transportation system, followed by a discussion of the Federal, State and local transportation regulations. A qualitative analysis of potential transportation-related effects associated with Proposed Project facilities is provided in Section 7.3.2. Mitigation measures to avoid, eliminate or reduce effects to a less than significant level are also provided where appropriate. Finally, Section 7.4 identifies transportation-related effects found not to be significant.

7.1 REGIONAL SETTING

7.1.1 Highway and Road System

Residents of San Diego County depend on automobiles and trucks for the majority of their local and regional transportation requirements. As a result, a variety of interstate, State, and county routes, and local arteries exist to provide for vehicles to travel through the County to other locations. The County maintains approximately 2,000 miles of roads which serve about 400,000 vehicles per day (San Diego County 2003a). Most of the traffic and road systems are in populated centers around the City of San Diego and nearby suburbs (e.g., Chula Vista, La Mesa, Lemon Grove, Imperial Beach, and El Cajon) and along towns and cities adjacent to the Pacific Ocean (e.g., Solana Beach, Encinitas, Oceanside, and Carlsbad).

Major interstate routes in the County include I-5, I-8, I-15, and I-805 (see **Figure ES-1**). I-5 and I-15 are major north-south routes to Los Angeles County, Orange County, Riverside County, and other counties to the north or beyond. Additionally, I-5 is a major vehicle route to and from Mexico. I-8 is the major east-west highway in the County for vehicles traveling to and from Imperial County and Arizona. I-805 is a major commuter route for residents traveling north to south in the greater San Diego area.

Major north-south state routes include SR 67 and SR 79 and major east-west state routes include SR 76, SR 78, and SR 94 (see **Figure ES-1**). Fewer state routes exist in the eastern portion of the county due to small populations in these locations. Major County routes that provide vehicle access for residents living in these more rural areas include S1, S2, S3, and S22.

Caltrans is responsible for the design, construction, and maintenance of the California State Highway System. Additionally, Caltrans is responsible for maintenance and improvements to interstate highways within the State. Caltrans District 11 is responsible for managing the highway system in San Diego County. In addition to Caltrans, the U.S. DOT, Federal Highway Administration (FHWA) provides oversight of projects involving Federal highways and funding.

Due to vehicle traffic congestion of the road system in and around the City of San Diego, the City of San Diego and neighboring cities have been working to develop and deploy a series of Intelligent Transportation Systems (ITS). To meet current and future traffic situations in the area, the San Diego Region ITS Planning Subcommittee has developed a Strategic Deployment Plan. The purpose of this plan is to improve operations of the freeway, arterial, and other transit systems by applying advanced sensor, computer, electronics, communications technology, and management strategies to improve the safety and efficiency of the surface transportation system in the greater San Diego region.

7.1.2 Public and Rapid Transportation Systems

San Diego County has a variety of public transportation systems available to residents and visitors. Most of the rapid transportation system is within the City of San Diego, suburbs of the City, or coastal towns and cities adjacent to the Pacific Ocean. As well as promoting Park and Ride services, the County operates a bus network and a heavy rail system along the coast. A light rail public transportation system is also available to carry passengers from local suburbs to downtown San Diego.

The Metropolitan Transit System (MTS) is composed of a variety of public transportation groups such as the Metropolitan Transit Development Board (MTDB) and the North County Transit District (NCTD). The MTDB operates a bus system through the San Diego Transit Corporation (SDTC). The SDTC provides local and regional bus services for passengers in suburban and remote locations to the north, east, and south of the City of San Diego. In 2002, approximately 15 million passengers used this bus system on the 29 fixed routes that traverse 635 miles of San Diego County roads (MTS 2003a). The MTDB also operates Paratransit, Flex Route, and Dial-A-Ride services in several County locations as well as a light rail transportation system (called a trolley system) in the greater San Diego area.

The NCTD provides public and rapid transportation services in the northern portion of San Diego County. The NCTD currently operates both a bus system and heavy rail line. Additionally, the NCTD is planning to operate a light rail system called the "Sprinter" by 2005. The Sprinter will provide new rail service from Oceanside to Escondido with stops at Vista and San Marcos.

The NCTD bus service covers approximately 1,000 square miles and provides scheduled service to a population of about 800,000 people. The NCTD has a fleet of 159 buses which services 56 scheduled routes. This bus fleet carries approximately 11 million passengers every year and has express services to downtown San Diego (MTS 2003b).

The NCTD operates a heavy rail passenger line called the "Coaster". The Coaster travels from Oceanside to downtown San Diego along the Pacific Ocean. The Coaster operates Monday through Saturday with stops at Carlsbad Village, Carlsbad Poinsettia, Encinitas, Solano Beach, Sorrento Valley, and Old Town.

7.1.3 Airports

The largest airport in San Diego County is the San Diego International Airport (Lindbergh Field) located just north of downtown San Diego. This airport provides international and domestic flight services. The airport is used by commercial airlines (carriers and commuters), civil aviation (business and private aircraft), and military aircraft. In 2002, operations from this airport consisted of approximately 145,000 air carrier; 45,000 air commuter; 15,000 civil; and 1,300 military flights (San Diego International Airport 2002).

Most major airlines provide passenger services from this airport. In 2002, approximately 15 million passengers flew to and from San Diego International Airport (San Diego International Airport 2002). Additionally, the San Diego International Airport provides major domestic and international airfreight services. In 2002, approximately 133,000 tons of airfreight were transported through the airport (San Diego International Airport 2002). This represented an increase of about 12 percent over 2001 (San Diego International Airport 2002).

San Diego County operates eight other smaller airports throughout the county. A summary of the features of these airports is provided in **Table 7-1**.

Table 7-1
Features of Public Airports Operated by San Diego County

Airport Name	Airport Location (Nearest City)	Runway Type	Runway Length(s) (feet)	No. of Flights Annually (2002)	No. of Aircraft Based at Airport
Ramona Airport	Ramona	Paved	5,000	101,000	195
McClellan-Palomar Airport	Carlsbad	Paved	4,600	204,000	395
Ocotillo Airport	Ocotillo Wells	Dirt	2,475 and 4,210	300	1
Jacumba Airport	Jacumba	Dirt and Gravel	2,510	2,000	1
Gillespie Field	El Cajon	Paved	2,737, 4,147, and 4,431	183,000	820
Fallbrook Airport	Fallbrook	Paved	2,160	21,000	55
Borrego Valley Airport	Borrego Springs	Paved	5,000	18,000	20
Agua Caliente Airport	Agua Caliente Hot Springs	Paved	2,500	600	1

Source: San Diego County 2003b.

The United States military also operates a variety of airports within San Diego County. The most prominent of these airfields are at North Island, Imperial Beach, and Marine Corps Air Station Miramar. The location of airports within San Diego County is shown on **Figure ES-2**.

7.1.4 Ports

The City of San Diego has a major west coast harbor operated by the Port of San Diego. This port is used by the U.S. Navy, cruise lines, commercial ships, and private boats. The Port's jurisdiction covers approximately 2,795 acres of land and about 3,034 acres of water and is ranked 48th in the United States for container cargo handling (Port of San Diego 2001).

Several major cruise lines operate out of the port of San Diego, and Holland America and Royal Caribbean International use the port as a homeport for several of their fleet of ships. In 2001, approximately 191,000 passengers docked at the Port of San Diego (Port of San Diego 2001).

The City of San Diego is a major permanent port for the U.S. Navy and the homeport of the Third Fleet. The U.S. Navy controls approximately 980 acres of land and about 325 acres of water. Approximately 89 Pacific Fleet ships berth at this Naval facility (U.S. Navy 2003).

7.1.5 Railroad Lines

There are a few major railroad lines in San Diego County. The main railroad line in the County is the AT&SF. This rail line travels generally adjacent to the Pacific Ocean and provides rail freight service from the City of San Diego north to the Los Angeles area and other points. There are two spur lines located along this main AT&SF railroad line, one to Fallbrook and one to Escondido. A major switchyard on the Fallbrook line is located at Chappo. The AT&SF railroad tracks adjacent to the Pacific Ocean are also used for Amtrak passenger service.

The second railroad line in the County is the SD&AE railroad line. There are two sections of this line in San Diego County. The first section of this line extends from Santee through downtown San Diego to the California-Mexico border at Tijuana. The second portion of the SD&AE railroad line extends from the California-Mexico border (approximately 20 miles east of San Diego) and travels eastward to Imperial County and Arizona. The location of railroad lines within the county is shown on **Figure ES-2**.

7.2 REGULATORY SETTING

7.2.1 Federal

The U.S. DOT provides funding and oversight of the Federal highway system. The Federal regulation that could affect proposed projects relates to motor carriers. The Motor Carrier Safety Regulations (Title 49, CFR, Subtitle B, Chapter III, Subchapter B) specifies safety considerations for transportation of goods, materials, and substances over public highways and roadways by haul trucks.

7.2.2 State

Caltrans is responsible for constructing, enhancing, and maintaining the State highway and interstate freeway systems. As a result, any change to the State roadway system requires an encroachment permit from Caltrans.

In addition to maintaining highways and general regulations and laws dealing with licensing, traffic signage, and other noncommercial driver requirements, State laws and regulations also govern motor carriers on roadways within the State. Some of the State laws and regulations that could apply to motor carriers for the Water Authority's Proposed Project include:

- **California Vehicle Code (Division 14.8 - Safety Regulations, Sections 34500, 34501, 34501.3, and 34510 to 34511)** – This law specifies the requirements for the safe operation of motor vehicles, especially those motor vehicles used for the transportation of hazardous materials and explosives;
- **California Vehicle Code (Division 2, Sections 2500 through 2505)** – This law provides the requirements for issuance of licenses by the Commissioner of the California Highway Patrol (CHP) for transportation of explosives over state roadways;
- **California Vehicle Code (Section 32105)** – This law establishes the requirements for shippers of explosive materials that are in contact with the CHP and that these shippers apply for a Hazardous Material Transportation License for the transportation of these materials; and
- **California Vehicle Code (Section 35780); California Streets and Highways Code (Section 660 through 711); and Title 21, CCR, Sections 1411.1 through 1411.6** - These laws identify the procedures and approvals obtained through Caltrans for the transportation of oversized or excessive loads over State highways and roadways.

7.2.3 Local

Traffic-related policies included in city general plans typically concern traffic resulting from project operation rather than project construction. However, some cities incorporate restrictions in their general plan that pertain to construction activities in or through their jurisdictional areas such as assigning specific truck traffic routes, or requiring the development of Traffic Control Plans. Due to the lack of inclusion and variation in local policies as they relate to construction traffic, the various city policies are not enumerated herein, but would be considered in the necessary environmental review process conducted for specific projects prior to construction.

As stated above, general plan traffic policies primarily relate to traffic conditions resulting from project operation. Because the Proposed Project facilities would generate only minor amounts of operations-related traffic and would not result in changes to existing levels of service (LOS) of roads and intersections, general plan policies are assumed to be inconsequential and are not enumerated herein (see Section 7.4, Effects Found Not to be Significant).

7.3 IMPACTS AND MITIGATION

7.3.1 Methodology and Standards of Significance

7.3.1.1 Level of Service Methodology

The LOS methodology is used to measure vehicular traffic congestion on roadways. The LOS concept uses qualitative measures to characterize operational conditions within the roadway

traffic stream. Levels of service are defined and categorized as letters from "A" to "F" with "A" representing the best operating conditions and "F" representing the worst operating condition for the roadway. Operational condition descriptions and related LOS ratings for roadways are provided in **Table 7-2**. The LOS operational conditions provided in this table are based on a variety of conditions such as speed, travel time, freedom to maneuver, safety, and driving comfort and convenience.

The LOS ratings are also used to characterize intersection congestion. Intersection congestion is expressed in delay times of street crossing, because delay times represent driver and/or passenger discomfort, frustration, fuel consumption, and lost travel time. The LOS and delay factor for intersections are provided in **Table 7-3**. It should be noted that the delay times presented in this table include the following:

- Initial deceleration time at the intersection;
- Queue period for the vehicle at the intersection;
- Stopped or waiting time at the intersection; and
- Final acceleration time across the intersection.

To evaluate the operational condition of a roadway or signalized intersection, the existing average daily traffic (ADT) volume is used to determine the current LOS. This current LOS is then compared with the resultant increase in traffic of the project during construction and operation. If the LOS changes, a traffic impact could occur, particularly if the LOS changes to a value of D or less.

7.3.1.2 Significance Criteria

Potential traffic and transportation impacts would be assessed through consideration of the roadway and traffic conditions (at the time of the project specific CEQA review), potential project-related vehicle use, and roadway intrusion to determine potential disruption of traffic patterns. Impacts resulting from project-related activities 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.

Table 7-2
Operational Condition Descriptions and LOS Ratings for Roadways

Level of Service	Operational Conditions	Congestion / Delays	Average Vehicle Delay
Used for Surface Streets, Freeways, Expressways, and Conventional Highways			
A	**Free Flow** – Low volumes; primarily free-flow operations. Density is low and vehicles can freely maneuver within the traffic stream. Drivers can maintain their desired speeds with little or no delay.	None	0.0 to 5.0 seconds
B	**Stable Flow** – Traffic volume has potential for some restriction of operating speeds due to traffic conditions. Maneuvering is only slightly restricted. The stopped delays are not bothersome, and drivers are not subject to appreciable tension.	None	5.1 to 15.0 seconds
C	**Stable Operations** – Drivers have the ability to maneuver; traffic is more restricted by the increase in traffic volumes. Relatively satisfactory operating speeds prevail, but adverse signed coordination or longer queues cause delays.	None to Minimal	15.1 to 25.0 seconds
D	**Approaching Unstable** – Small increases in volumes could cause substantial delays. Most drivers are restricted in their ability to maneuver and in their selection of travel speeds. Comfort and convenience are low but tolerable.	Minimal to Substantial	25.1 to 40.0 seconds
E	**Unstable Operations** – Traffic is characterized by significant approach delays and average travel speeds of one-half to one-third free-flow speed.	Significant	40.1 to 60.0 seconds
Used for Surface Streets and Conventional Highways			
F	**Forced Flow** – Traffic volume results in operations with high approach delays at critical signalized intersections. Speeds are reduced substantially, and stoppages may occur for short or long periods of time because of downstream congestion.	Considerable	>60 seconds
Used for Freeways and Expressways			
F(0)	**Forced Flow Level 0** – Heavy traffic congestion with long queues from behind breakdown points. Traffic is at a stop and go level.	Considerable	0 to 1 hour
F(1)	**Forced Flow Level 2** – Very heavy traffic congestion with very long queues.	Severe	1 to 2 hours
F(2)	**Forced Flow Level 3** – Extremely heavy traffic congestion with longer queues. More numerous breakdowns in traffic flows with longer stop and go periods.	Very Severe	2 to 3 hours
F(3)	**Forced Flow Level 3** – Gridlock	Extremely Severe	>3 hours

Source: Compilation of data from Caltrans and a number of other sources.

Table 7-3
Operational Condition Descriptions and LOS Ratings for Signalized Intersections

Level of Service	Operational Conditions	Average Vehicle Delay (seconds)
A	Very low delay at intersection. This occurs when progression is extremely favorable, and most vehicles do not stop at all. Short cycle lengths may also contribute to low delays.	<10
B	Generally good progression and/or short cycle lengths at the intersection. More vehicles stop than for LOS A, causing higher level of average delays.	10.1 to 20.0
C	Higher delays which may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	20.1 to 35.0
D	Higher delays than LOS C resulting from some combination of unfavorable progression, long cycle lengths, or high traffic volumes. The influence of congestion becomes more noticeable, and individual cycle failures are noticeable.	35.1 to 55.0
E	Limit of acceptable delays at intersection. Individual cycle failures are frequent occurrences.	55.1 to 80.0
F	Excessively high delay at intersection resulting in considerable unacceptable delay by most drivers. This condition often occurs when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes to such delay.	>80.0

Source: San Diego County 2003a.

7.3.2 Impacts and Mitigation Measures

This section identifies the potentially significant adverse program-level impacts and required mitigation measures for Proposed Project facilities. **Table 7-4** presented at the end of this section identifies the potential program-level impacts of each of the Proposed Project facilities. This program-level analysis is not intended to describe or address the impacts in detail; detailed evaluations of the impacts of specific projects will be conducted as part of a site-specific CEQA review.

Unless otherwise noted, all identified impacts are considered to be potentially significant adverse impacts. Corresponding mitigation measures, unless otherwise noted, are expected to be sufficient to reduce impacts to a less than significant level.

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).

Implementation of these mitigation measures will reduce the impact to a less than significant level.

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).

7.4 EFFECTS FOUND NOT TO BE SIGNIFICANT

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.

Table 7-4
Potential Program-Level Traffic and Transportation Impacts of Proposed Project Facilities

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

Table 7-4 (continued)
Potential Program-Level Traffic and Transportation Impacts of Proposed Project Facilities

* The ultimate level of seawater desalination development in the region would depend largely upon actual regional population growth, economics, availability of other high quality water sources, as well as an evaluation of the performance of the Encina seawater desalination facility, should it be approved and constructed.

[a] 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.

[b] Construction activities could result in damage to local roadways.