

5.15 Transportation and Traffic

This section describes transportation and traffic regulations and the Project area's existing transportation system, identifies significance criteria for transportation and traffic impacts, and evaluates potential impacts resulting from Project implementation. Traffic data concerning construction-related impacts was derived from the air quality/greenhouse gas emissions modeling assumptions, which includes estimated daily construction worker commute trips, materials deliveries, and soil import/export truck trips that would occur during the construction phase. These modeling assumptions can be found in Appendix 3.

5.15.1 Regulatory Framework

Federal

Americans with Disabilities Act of 1990

Titles I, II, III, and V of the Americans with Disabilities Act (ADA) have been codified in Title 42 of the United States Code, beginning at Section 12101. Title III prohibits discrimination based on disability in “places of public accommodation” (businesses and non-profit agencies that serve the public) and “commercial facilities” (other businesses). The regulation includes Appendix A through Part 36 (Standards for Accessible Design), regarding establishing minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility. Examples of key guidelines include detectable warnings for pedestrians entering traffic where there is no curb, a clear zone of 48 inches for the pedestrian travelway, and a vibration-free zone for pedestrians.

Title 33, Code of Federal Regulations, Vols. 1-3 (Navigation and Navigable Waters). Federal regulations concerning marine navigation are contained in Title 33, Code of Federal Regulations (CFR) Volumes 1 through 3, otherwise referred to as Parts 1-399, implemented and enforced by the U.S. Coast Guard (USCG) and the U.S. Army Corps of Engineers. The regulations contained in 33 CFR 1-399 include vessel operating regulations, use of anchorages, marine pollution, and activities in the outer continental shelf area. Federal regulations governing shipping are covered by 46 CFR Parts 1–399, implemented and enforced by the USCG and Department of Transport, Maritime Administration. Specifically, CFR Title 33, Chapter I, Subchapter P, Part 161 defines the purposes and intent of the Vessel Traffic Services (VTS). VTS in Los Angeles/Long Beach are jointly operated by the USCG and the Marine Exchange of Southern California.

Broadcast Notice to Mariners

The USCG is responsible for maritime safety. Broadcast Notice to Mariners are made by the USCG containing important navigational warnings such as reports of deficiencies and changes to aids to navigation, the positions of derelict vessels, and other important hydrographic information. Local Notice to Mariners (LNM) are published weekly and are used to report changes and discrepancies to aids to navigation, channel depths, naval operations, regattas, etc. that may affect vessels and waterways. Reports of channel conditions, obstructions, menaces to navigation, danger areas, new chart editions, etc. are also included in the LNM.

Navigation Rules and Regulations Handbook

The USCG publishes a Navigation Rules and Regulations Handbook. This document is a compendium of international and U.S. applicable regulations pertinent for waterway users. All U.S. flag vessels are ratified to the rules contained in this handbook, including the provisions of the International Navigational Rules Act of 1977 (Public Law 95-75, 91 Stat. 308, or 33 U.S. Code 1601–1608). The Rules stipulate the steering and sailing use of Traffic Separation Schemes for all vessels.

State

California Vehicle Code

The California Department of Transportation (Caltrans) has jurisdiction over the improvement and operation of state highways. Caltrans is responsible for establishing maximum load limits for trucks and for safety requirements for oversized vehicles that travel on such highways. Caltrans implements the following regulations and manuals:

- *California Vehicle Code Division 15, Chapters 1 through 5 (Size, Weight, and Load)]* – Provides regulations pertaining to licensing and the size, weight, height, and load of vehicles operating on State highways.
- *California Vehicle Code Sections 13369, 15275, and 15278* – Requires licensing of drivers and specific license classifications for operation of particular vehicle types. Section 13369 applies to passenger transportation vehicles, hazardous materials, school busses, school pupil activity buses, youth buses, general public paratransit vehicles, farm labor vehicles, and vehicles used to transport developmentally disabled persons. Section 13369 grants the Department of Motor Vehicles the right to refuse to issue or renew, or revoke, a driver's certificate of endorsement. Section 15275 identifies the endorsements necessary to operate vehicles (including those transporting hazardous materials) and grants the Department of Motor Vehicles the authority to deny, suspend, revoke, or cancel a commercial vehicle endorsement or a hazardous materials endorsement when the applicant does not meet the qualifications for issuance or retention of an endorsement or poses a security threat. Section 15278 requires that a driver obtain an endorsement from the Department of Motor Vehicles to operate any commercial motor vehicle including: double trailer, passenger transportation vehicle, school bus, tank vehicle, and vehicles carrying hazardous materials, as defined in Section 353.
- *California Vehicle Code Sections 35550-35551* – Provides regulations regarding weight limitations for vehicles travelling on freeways and highways. Section 35550 stipulates the maximum wheel load for vehicles travelling on highways. Section 35551 stipulates the maximum total gross weight imposed on the highway by any group of two or more consecutive axles.

California Street and Highway Code Sections 660–711

The California Street and Highway Code requires that a project applicant obtain Caltrans-issued permits for any activity that encroaches into the right-of-way (ROW) of a state highway. Regulations pertaining to the maintenance and protection of state and county highways and provisions for the issuance of written permits (required when a vehicle load exceeds weight, length, or width standards established by Caltrans for public roadways and state highways) are also provided.

California Department of Transportation California Manual of Uniform Traffic Control Devices Part 6 (Traffic Manual)

The California Department of Transportation California Manual of Uniform Traffic Control Devices (MUTCD) Part 6 (Traffic Manual) provides guidance and standards for traffic control and continuity of roadway function. Caltrans revised the MUTCD in December 2015 to provide uniform standards and specifications for all official traffic control devices in California (known as Revision 1). MUTCD Revision 1 incorporates the Federal Highway Administration's 2009 MUTCD (revised in 2012) and incorporates policies on traffic control devices issues by the Department since November 7, 2014.

Senate Bill 743

On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743 into law and started a process that could fundamentally change transportation impact analysis as part of California Environmental Quality Act (CEQA) compliance. These changes will include elimination of auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts in many parts of California (if not statewide). Further, parking impacts will not be considered significant impacts on the environment for select development projects within infill areas with nearby frequent transit service. According to the legislative intent contained in SB 743, these changes to current practice were necessary to "...more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions."

In November 2017, the Governor's Office of Planning and Research released the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, which contains OPR's technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. The recommendations addresses OPR's proposed new Section 15064.3, *Determining the Significance of Transportation Impacts* (November 2017). The following key text concerning the analysis of transportation impacts is taken directly from the proposed new guidance:

(b) Criteria for Analyzing Transportation Impacts.

Lead agencies may use thresholds of significance for vehicle miles traveled recommended by other public agencies or experts provided the threshold is supported by substantial evidence.

(1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be considered to have a less than significant transportation impact.

(2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent

that such impacts have already been adequately addressed at a programmatic level, a lead agency may tier from that analysis as provided in Section 15152.

California Harbors and Navigation Code

“Navigable waters” are defined to be waters that come under the jurisdiction of the U.S. Army Corps of Engineers. Specifically, this refers to the state’s three nautical miles (from mean high water jurisdictional limit. As mentioned under Federal regulations, the VTS are provided by a joint venture between the USCG and the Marine Exchange of Southern California. The USCG Marine Exchange provides traffic monitoring and reporting through three sectors, the San Pedro Channel/Santa Monica Bay and the Port of Los Angeles (POLA) and Port of Long Beach (POLB).

Regional

2016–2040 Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) functions as the Metropolitan Planning Organization (MPO) for six counties in the surrounding region, including Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties. SCAG is mandated by the federal government to research and formulate plans for transportation, growth management, hazardous waste management, and air quality. Additional state-imposed mandates also exist at the state level. SCAG is responsible for ensuring a comprehensive, coordinated planning process and for development of demographic projections for future area growth.

SCAG adopted the 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Towards a Sustainable Future in April 2016. The plan is intended to provide guidance for increasing mobility for the region’s residents and visitors, while emphasizing sustainability and integrated planning. The RTP/SCS encompasses three key principles for the region’s future: mobility, economy, and sustainability. The 2016 RTP/SCS emphasizes a commitment to reducing emissions from transportation sources in conformance with SB 375, improving public health, and meeting the federal Clean Air Act National Ambient Air Quality Standards. Refer to Table 5.10-2, SCAG Consistency Analysis, for a review of the Project’s consistency with the 2016 RTP/SCS.

CEQA Intergovernmental Review

SCAG’s Intergovernmental Review (IGR) section provides consistency review of regionally significant local plans, projects, and programs with SCAG’s adopted regional plans. The criteria for projects of regional significance are outlined in CEQA Guidelines Section 15125.

CEQA review of a regionally significant project must demonstrate its consistency with the 2016 RTP/SCS, which is established through consistency with 2016 RTP/SCS Goals and Adopted Growth Forecasts. SCAG encourages use of the SCAG List of Mitigation Measures extracted from the 2016 RTP/SCS Program EIR to aid with demonstrating consistency with regional plans and policies.

2010 Los Angeles County Congestion Management Program

The 2010 Los Angeles County Congestion Management Program (CMP) is intended to address the impact of local growth on the regional transportation system. It is Los Angeles County Metropolitan Transportation Authority's goal to comply with statutory requirements of the CMP, including monitoring LOS on the CMP Highway and Roadway network, measuring frequency and routing of public transit, implementing the Transportation Demand Management and Land Use Analysis Program Ordinances, and helping local jurisdictions meet their responsibilities under the CMP.

According to CMP Exhibits 2-3 and 2-4, following are the CMP highways/roadway intersections located in the Project area:

- Pacific Coast Highway, Lincoln Boulevard, Sepulveda Boulevard (State Route [SR] 1)
- Glenn Anderson Freeway (SR 105)
- Hawthorne Boulevard (SR 107)

According to CMP Chapter 5, *Land Use Analysis Program*, the program's objective is to identify site-specific impacts and mitigation for the regional highway, freeway and transit systems within the vicinity of major projects. A CMP Traffic Impact Analysis (TIA) is required at:

- All CMP arterial monitoring intersections, including monitored freeway on-ramps or off-ramps, where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours.
- If CMP arterial segments are being analyzed rather than intersections, the study area must include all segments where the proposed project will add 50 or more peak hour trips (total of both directions).
- Mainline freeway monitoring locations where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

If, based on these criteria, no CMP facilities are identified for study, no further highway or freeway system analysis need be conducted, and only the transit component of the TIA is required. If CMP facilities are identified for further study, then the implementing agency must determine whether significant impacts occur on the CMP system as a result of the Project.

Airport Land Use Plans

Airport Land Use Commissions (ALUCs) have been established for all counties with public use airports within the state of California. ALUCs are formed with the specific intent of implementing state law (Public Utilities Code) regarding airports and surrounding land use compatibility. The purpose of the ALUC is "to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses." The Los Angeles County ALUC, in conjunction with the Los Angeles Department of Regional Planning, adopted the *Los Angeles County Airport Land Use Plan* in December 1991 (revised December 2004). This

plan delineates areas located near public airports that are subject to noise impacts and safety hazards (height restriction areas, and approach surface and runway protection zones).

Los Angeles County Code

Los Angeles County Code prohibits boating within 300 yards of the shore. The only exception to Chapter 17.12 applicable to the Project is Clause B: “when necessary due to an emergency aboard the vessel.” Any vessel associated with the Project is subject to the Beaches section of the Los Angeles County Code.

Los Angeles-Long Beach Vessel Traffic Service User Manual

The Marine Exchange of Southern California and the USCG, in partnership with the Port of Los Angeles and the Port of Long Beach, established the Los Angeles-Long Beach Vessel Traffic Service (VTS) User Manual to enhance the safe, environmentally sound, and efficient maritime transportation for the San Pedro Channel, Santa Monica Bay, Port of Los Angeles, and Port of Long Beach. The purpose of the VTS “is to improve vessel transit safety by providing vessel operators with advance information of other reported marine traffic and any additional information, advice and recommendations which may affect vessel traffic safety within the VTS area.” (MXSocal and USCG 2015). The VTS manual includes communication procedures and vessel movement and reporting procedures for: 1) active users, which include power driven vessels of 40 meters or more in length while navigating, commercial towing vessels 8 meters or more in length, or vessels certified to carry 50 passengers or more; and 2) passive users, which include power driven vessels of 20 meters more in length while navigating, vessels of 100 tons or more carrying passengers, and all dredge vessels or floating plants.

Local

City of El Segundo General Plan

El Segundo adopted the comprehensive El Segundo General Plan in 1992. The Circulation Element of the General Plan was last updated in 2004 and provides goals, policies, and objectives for circulation planning within the City’s jurisdiction. The Circulation Element evaluates the then (1992) existing conditions and provides the long-term goals and policies necessary to guide circulation growth and development over future years. Through such goals, policies, and objectives, the Circulation Plan serves as a decision-making tool to guide the City’s future transportation-related decisions.

The following Circulation Plan goals, objectives, and policies pertain to transportation facilities within the city:

Goal C1: Provision for a Safe, Convenient, and Cost Effective Circulation System. Provide a safe, convenient, and cost effective circulation system to serve the present and future circulation needs of the El Segundo community.

Objective C1-1: Provide a roadway system that accommodates the City’s existing and projected land use and circulation needs.

Policy C1-1.9: Provide all residential, commercial, and industrial areas with efficient and safe access for emergency vehicles.

Policy C1-1.14: Require a full evaluation of potential traffic impacts associated with proposed new developments prior to project approval. Further, require the implementation of appropriate mitigation measures prior to, or in conjunction with, project development. Mitigation measures may include new roadway links on segments that would connect the new development to the existing roadway system, intersection improvements, and other measures. Mitigation measures shall be provided by or paid for by the project developer.

Goal C-2: Provisions for Alternative Modes of Transportation. Provide a circulation system that incorporates alternatives to the single-occupant vehicle, to create a balance among travel modes based on travel needs, costs, social values, user acceptance, and air quality considerations.

Objective C2-1: Provide a pedestrian circulation system to support and encourage walking as a safe and convenient travel mode within the City's circulation system.

Objective C2-3: Ensure the provision of a safe and efficient transit system that will offer the residents, workers, and visitors of El Segundo a viable alternative to the automobile.

Goal C3: Development of Circulation Policies that are consistent with other City Policies. Develop a balanced General Plan, coordinating the Circulation Element with all other Elements, ensuring that the City's decision making and planning activities are consistent among all City departments.

Policy C3-1.2: The minimum acceptable level of service (LOS) at an intersection is LOS D. Intersections operating at LOS E or F shall be considered deficient. If traffic caused by a development project is forecast to result in an intersection level of service change from LOS D or better to LOS E or F, then the development impact shall be considered significant. If a development project is forecast to result in the increase of intersection volume/capacity ratio (V/C) of 0.02 or greater at any intersection that is forecast to operate at LOS E or F, the impact shall be considered significant.

Policy C3-1.6: Planning principles and Circulation Element goals, objectives, and policies should apply consistently to all land uses in the City.

City of El Segundo Municipal Code

The City of El Segundo Municipal Code, Section 10-3-11(E): RULES AND REGULATIONS, states:

No person shall operate any vessel within three hundred (300) yards of the shoreline of any beach regulated by this Chapter except when necessary in taking it to or from its lawful mooring place or when necessary in the case of emergency, or upon special permit issued by the City Council.

Prior to placement of heavy anchors offshore of El Segundo Beach, a special permit is required to be obtained from the City to operate vessels along the shoreline, in addition to all applicable regulatory agency permits.

City of Manhattan Beach

Manhattan Beach adopted the Manhattan Beach General Plan in 2003. The Circulation portion of the Infrastructure Element was last updated in 2003, and provides goals, policies, and objectives

for circulation planning within the City’s jurisdiction. Because the City of Manhattan Beach borders the proposed Project to the south, the following Infrastructure/Circulation Element goals, objectives are identified below:

Goal I-1: Provide a balanced transportation system that allows the safe and efficient movement of people, goods and services throughout the City.

Policy I-1.4: Work with neighboring communities and other South Bay cities, as well as state and other agencies, to develop regional solutions to traffic problems that are regional in nature, and to mitigate impacts of development in neighboring communities that impact the City of Manhattan Beach.

Goal I-2: Move commuter traffic through the City primarily on arterial streets, and on collector streets as appropriate, to protect other streets from the intrusion of commuter traffic.

Policy I- 2.7: Monitor and minimize traffic issues associated with construction activities.

Other Municipal Plans and Policies

Depending on the final alignments and site selection, the proposed desalinated water conveyance facilities and regional pump station optional sites would traverse or be sited within the city of El Segundo and/or the following other surrounding jurisdictions:

- Gardena
- Hawthorne
- Lawndale
- Los Angeles County Department of Public Works
- Redondo Beach
- Torrance
- Del Aire – an unincorporated community of Los Angeles County
- El Camino Village¹ – an unincorporated community of Los Angeles County

General Plan and municipal code goals, policies, and/or objectives for the above jurisdictions generally are not relevant to the Project concerning traffic and transportation, with the exception of encroachment permits that may be required from the respective jurisdictions.

5.15.2 Environmental Setting

Roadways

The cities of El Segundo and the adjacent Manhattan Beach as well as the surrounding jurisdictions are urbanized and largely built out. The project area roadway network is predominantly comprised of a grid network with I-105 (Imperial Highway) and I-405 (San Diego Freeway) providing regional access to the area (see Figure 5.14-1 in Section 5.14, *Recreation*).

¹ Pipeline alignments are preliminary and are subject to change during final design and construction.

The existing environmental conditions presented below focuses on existing roadways, railroads, and public transit facilities that may be affected by traffic generated by Project construction.

Table 5.15-1 presents a list of potentially affected roadways, along with their respective roadway classifications.

The proposed ocean water desalination facility site would be located in the city of El Segundo at the El Segundo Generating Station (ESGS). Access to the ESGS is provided from Vista Del Mar Boulevard via a private gated access road located approximately 750 feet north of 45th Street (which is located in Manhattan Beach); refer to Figure 3-3. A secondary gated emergency access is provided through the Chevron facility located to the north of the ESGS.

The El Segundo General Plan Circulation Element Exhibit C-10, *Master Plan of Streets*, classifies City roadways as Local or Collector Streets, and Major Arterial or Secondary Arterials, based upon average daily traffic volumes and roadway design. Table 5.15-1 lists roadways that could potentially be affected by ocean water desalination facility construction and/or operation. At this time, it is anticipated that construction of the ocean water desalination facility would involve truck deliveries and materials export temporarily affecting the I-105, Imperial Highway, and Vista Del Mar Boulevard, with more limited Project traffic on local City streets to and from worker and materials staging areas.²

The desalinated water conveyance pipeline alignments and regional pump station optional sites traverse and/or are located within several jurisdictions; refer to Figure 3-4. The proposed conveyance pipeline alignments would be located within existing road ROW. The discussion presented below provides a brief overview of the roadways located along the proposed desalinated water conveyance alignments, according to jurisdiction.

City of El Segundo

Segments of the desalinated water conveyance components would be located within or adjacent to the city of El Segundo; refer to Figure 3-5. The roadways traversed by the desalinated water conveyance pipeline segments are outlined below (refer also to Table 5.15-1 and Figure 5.14-1):

- Aviation Boulevard
- El Segundo Boulevard
- Grand Avenue
- Illinois Street
- Main Street
- Vista Del Mar
- West Franklin Avenue

² Construction haul routes are preliminary and are subject to change during final design and construction.

**TABLE 5.15-1
 ROADWAYS POTENTIALLY AFFECTED BY THE PROPOSED PROJECT**

Roadway	City	Classification	Roadway Description
Interstate 105	Multiple	Interstate Highway	Interstate 105, also known as the Glenn M. Anderson Freeway, is located approximately two miles north of the ESGS property. The road extends from Sepulveda Boulevard to the San Gabriel Freeway (I-605). The road trends east/west and is constructed to eight lanes (four in each direction, including a high-occupancy vehicle lane). The Metro Green Line commuter rail service, operated by the Los Angeles County Metropolitan Transportation Authority (Metro), is located in the center median of the freeway.
Interstate 405	Multiple	Interstate Highway	Interstate 405 (San Diego Freeway, I-405), located approximately four miles east of the ESGS property, is a north-south freeway providing regional access to the coastal communities on the western side of the City of Los Angeles. The freeway is constructed to provide four lanes in each direction in addition to auxiliary lanes. A high occupancy vehicle lane is available between Century Boulevard and Vermont Avenue.
Vista Del Mar	El Segundo	Secondary Arterial	Vista Del Mar trends north/south adjacent to the eastern Project boundary and currently provides access into the ESGS. The road is constructed as a four-lane undivided roadway. Access to the ocean water desalination facility site would be provided via Vista Del Mar at the southerly end of the ESGS property. The road is designated as a truck route in the City's General Plan Circulation Element.
Sepulveda Boulevard	El Segundo	Major Arterial	Sepulveda Boulevard is constructed as an eight-lane divided roadway. The road trends north/south and provides connection to I-405 north of Los Angeles International Airport (LAX) via Howard Hughes Parkway. The road also provides connection to I-105 south of LAX. Between Lincoln Boulevard and the Pacific Coast Highway, Sepulveda Boulevard is identified as State Route (SR) 1.
El Segundo Boulevard	El Segundo Gardena Hawthorne	Secondary Arterial/Major Arterial	El Segundo Boulevard is classified as a secondary arterial from Vista Del Mar to Sepulveda Boulevard. East of Sepulveda Boulevard, it is classified as a major arterial. The road trends east/west and allows vehicle connection to collector streets on the west side of El Segundo to the I-405. The road is identified as a truck route in the General Plan Circulation Element.
Grand Avenue	El Segundo	Secondary Arterial	The road is constructed as a four-lane undivided roadway from Vista Del Mar to Sepulveda Boulevard. To the east of Sepulveda Boulevard, the road is constructed as a six-lane divided roadway. The road trends east/west along its length.
Main Street	El Segundo	Collector Street/ Secondary Arterial	Main Street is collector road, constructed as a four-lane undivided roadway from El Segundo Boulevard to north of Grand Avenue. The road trends north/south along its length.
Aviation Boulevard	El Segundo Manhattan Beach County of Los Angeles	Major Arterial	Aviation Boulevard provides access through the Cities of Manhattan Beach and El Segundo. The road is constructed as a four-lane divided roadway, trending north/south.
Rosecrans Avenue	Manhattan Beach Lawndale Gardena Hawthorne	Major Arterial	East of Sepulveda Boulevard, the road is a six-lane divided roadway. From the western boundary of the City of Manhattan Beach to Sepulveda Boulevard, Rosecrans Avenue is constructed as a five-lane divided road having three westbound lanes and two eastbound lanes.
Imperial Highway	El Segundo	Secondary Arterial	The road is constructed as a four-lane divided roadway from Main Street to Sepulveda Boulevard. Imperial Highway is a six-lane divided roadway to the east of Sepulveda Boulevard.

Roadway	City	Classification	Roadway Description
Highland Avenue	Manhattan Beach	N/A	This road is the continuation of Vista Del Mar Boulevard south into Manhattan Beach. It continues as a four-lane undivided roadway.
45 th Street	Manhattan Beach	N/A	The road is a two-lane divided roadway adjacent to the proposed ocean water desalination facility's ESGS South Site.

City of Manhattan Beach

While no proposed Project facilities are located in Manhattan Beach, the ocean water desalination facility would be located in southern El Segundo adjacent to the Manhattan Beach community of El Porto. The four-lane divided roadway of Vista Del Mar Boulevard continues as Highland Avenue in Manhattan Beach. The 45th Street in Manhattan Beach is adjacent to the proposed ocean water desalination facility's ESGS South Site.

City of Redondo Beach

As shown in Figure 3-5, the desalinated water conveyance pipeline segments (the WB Feeder Connector) would border or traverse the following city of Redondo Beach roadways: Inglewood Avenue and Manhattan Beach Boulevard.

City of Lawndale

As shown in Figure 3-5, the desalinated water conveyance pipeline segments (the WB Feeder Connector) would traverse or border the following city of Lawndale roadways:

- Hawthorne Boulevard
- Inglewood Avenue
- Manhattan Beach Boulevard
- Prairie Avenue
- Rosecrans Boulevard

City of Gardena

As shown in Figure 3-5, the desalinated water conveyance pipeline segments (the WB Feeder Connector) would traverse or border the following city of Gardena roadways:

- El Segundo Boulevard
- Manhattan Beach Boulevard
- Marine Avenue
- Rosecrans Boulevard
- Van Ness Avenue
- West 135th Street

City of Hawthorne

As shown in Figure 3-5, the desalinated water conveyance pipeline segments (WC Feeder Service Connector, WB Feeder Connector, and Regional Pipeline) would traverse or border the following city of Hawthorne roadways:

- El Segundo Boulevard
- Hawthorne Boulevard
- Inglewood Avenue
- Prairie Avenue
- Rosecrans Boulevard
- Van Ness Avenue
- West 120th Street
- West 135th Street

Additionally, the WC Feeder Service Connector would be aligned along El Segundo Boulevard.

Unincorporated Los Angeles County

As shown in Figure 3-5, the desalinated water conveyance pipeline segments (Regional Pipeline, WC Feeder Service Connector, and WB Feeder Connector) would traverse or border the following County of Los Angeles roadways:

- West 120th Street
- Aviation Boulevard

Segments of the WB Feeder Connector would be aligned along:

- West 135th Street
- Marine Avenue
- Manhattan Beach Boulevard
- Prairie Avenue

Additionally, the WC Feeder Service Connector would be aligned along El Segundo Boulevard.

Railways

The Los Angeles County Metropolitan Transportation Authority (Metro) system provides rail and bus services to the Los Angeles metropolitan area in the vicinity of the proposed ocean water desalination facility sites. The Metro Green Line extends north from Redondo Beach then east at the Los Angeles International Airport (LAX) to Norwalk and serves the city of El Segundo. The railway station in El Segundo is located at 2226 East El Segundo Boulevard just east of North Nash Street. The Green Line also provides connection to the Blue Line, which runs between downtown Long Beach and downtown Los Angeles.

Rail services to the communities traversed by the proposed water conveyance pipelines are served by the Green Line; communities south of Hawthorne are not served by rail. As indicated above, the Green Line extends eastward from LAX and passes through the cities of Hawthorne and Lennox, terminating at Norwalk. The Hawthorne/Lennox Station is located just east of Hawthorne Boulevard, adjacent to I-105; the Crenshaw Station is located along Crenshaw Boulevard, adjacent to I-105.

Bus Service

The Metro system also provides bus service within the city of El Segundo. Route 232 runs generally north-south through the city, commencing at LAX on the north and extending to Manhattan Beach and beyond on the south. Route 125 commences in the city of El Segundo at the Rosecrans Avenue/North Sepulveda intersection and extends east to the city of Bellflower (LAMTA 2016).

Bus service to the Project site is also provided by the Commuter Express system, operated by the Los Angeles Department of Transportation. Route CE438 runs along Vista Del Mar Boulevard in the site vicinity, continuing along Highland Avenue to the south and Imperial Highway to the north/east (LAMTA 2016). Bus stops are located along the east and west sides of Vista Del Mar Boulevard just north of the intersection with 45th Street.

Bus services for the other communities potentially traversed by the water conveyance pipeline are provided by the Metro system. Several other municipal bus operators also provide service within the affected communities of Redondo Beach, Lawndale, and Gardena (LAMTA 2016).

Bicycle/Pedestrian Circulation

El Segundo offers a network of Class I (exclusive bike paths and trails), Class II (on-street striped lanes), and Class III (shared ROW) bicycle lanes along local streets and in proximity to the proposed ocean water desalination facility, screened ocean intake, and concentrate discharge components. The Marvin Braude Coastal Bike Trail is located on the beach adjacent to the western ESGS property boundary. The trail is available for public use and supports both pedestrian, bicycle, and other forms of recreational travel. Several public surface parking lots providing access to the beach and the trail are present in the Project vicinity.

A standard pedestrian sidewalk is not provided along the Project frontage on the west side of Vista Del Mar Boulevard; however, a sidewalk is present along the east side. Within Manhattan Beach there is no sidewalk in front of the site on the north side of 45th Street; on the south side of 45th Street, sidewalks and residential driveways are hard to distinguish, making 45th Street a roadway that is inhospitable to pedestrian traffic.

Segments of the proposed conceptual desalinated water conveyance pipeline alignments traverse several bicycle facilities; refer to Figure 5.14-1. According to the *South Bay Bicycle Master Plan*, segments of the water conveyance pipeline alignments traverse the following City of El Segundo bicycle facilities: a proposed Class I Bike Path, Class II Bike Lane, Class III Bike Route along El Segundo Boulevard, and an existing Class II Bike Lane and proposed Class III Bike Route along Grand Avenue. Refer to Section 5.14, *Recreation*, for an expanded discussion of the

existing and proposed bicycle facilities located within the City of El Segundo’s jurisdiction, as well as along the proposed conveyance facility corridor. The provision of sidewalks along the proposed conveyance facility corridor varies by location.

Airports

LAX is located approximately 2.5 miles northeast of the proposed ocean water desalination facility site. The Hawthorne Municipal Airport, a public airport, is located approximately 5 miles in the northeast direction, in the city of Hawthorne.

Marine Traffic

Nearshore area

Los Angeles County code includes regulations for motorized and non-motorized vessels within 300 yards of the shoreline (defined to be mean high water). Specifically, these vessels are not allowed within 300 yards of the shoreline. Los Angeles County lifeguards and the USCG are responsible for enforcing this code. The USCG is stationed in Marina Del Rey and patrols 300 miles between Morro Bay and Dana Point. Given the proximity of the Project to King Harbor and Marina Del Ray, non-reporting motorized and non-motorized pleasure craft are anticipated immediately outside of the 300-yard limit established by Los Angeles County.

The larger Santa Monica Bay contains a number of navigation features, as tabulated in **Table 5.15-2**.

**TABLE 5.15-2
 NAVIGATION FEATURES IN SANTA MONICA BAY**

Feature	Description	Reference
Existing submarine cables	TyCom - perpendicular to beach. Assumed to be partially buried, landfall at Hermosa Beach	Nautical Charts 18748, 17840 & 18744
	Global West - perpendicular to the beach diverging north and south, landfall at Manhattan Beach	
Hermosa Beach Municipal Pier	750 feet from mean high water	
Manhattan Beach Pier	650 feet from mean high water	
Pilot Boarding Area	Commercial vessels and pilot boats transiting to/from the Pilot Boarding Area	
Commercial anchorages (ES-1 & ES-2)	Commercial vessels transiting to/from the anchorages 1 vessels under anchor swinging with tide	
Safety Zone	Submersed sewers extending seaward from El Segundo	
Exploratory survey & drilling operations in the vicinity of the Southern California TSS	Nautical Chart notes (e.g. drill rigs or other obstructions that may be a hazard)	
Uncharted submarine pipelines and cables in the vicinity of oil well structures	Nautical Chart notes (e.g. pipelines that may be a hazard)	
Fishing vessels between King Harbor and Marina Del Ray	Nautical Chart notes (e.g. boats that may be a hazard)	
Pleasure craft transiting from Marina del Ray & King Harbor along the coast	Nautical Chart notes (e.g. boats that may be a hazard)	

Santa Monica Basin and San Pedro Channel

Commercial marine traffic movements outside of Santa Monica Bay are largely dictated by the Traffic Separation Scheme (TSS) indicated on nautical charts—that is, northbound running southeast to northwest and southbound running northwest to southeast, divided by a separation zone. The intention of traffic separation zones is to aid in the prevention of collisions at the approaches to major harbors and/or heavily transited coastal waters. The separation zone between the lanes should be free of marine traffic and used only for crossing purposes. The TSS in this area runs from Santa Barbara inshore of the Channel Islands and Catalina Island, terminating at the regulated navigation area immediately offshore of POLA/POLB. TSSs are enforced by the USCG.

Both the POLA and POLB have cruise terminals, scheduled ferries running to and from Catalina Island, and seasonal whale-watching cruises. The large cruise ships are required to use the traffic separation scheme when traversing Santa Monica Bay. The ferries have designated routes and are not expected to deviate far from them. The whale-watching tours are not typically focused in Santa Monica Bay and they run on a schedule. Smaller fishing and pleasure craft are expected to avoid the TSS crossing only on dedicated voyages.

Marine vessel traffic is often measured in numbers of port calls per vessel. According to the POLB 2015 Air Emissions Inventory (POLB 2015), in 2015:

- 1,988 ocean-going vessels (commercial vessels of 300 gross registered tons or more calling on California ports or places, excluding active military vessels [SWRCB 2015a], including large containerships, auto carriers, tankers, and other miscellaneous bulk carriers) departed the POLB, an average of 5.4 per day
- 87 harbor craft (including tugboats, crew boats, ferries, and other work boats) actively operated out of the Port.

According to the POLA 2015 Air Emissions Inventory (POLA 2015), in 2015:

- 1,774 ocean-going vessels (commercial vessels of 300 gross registered tons or more calling on California ports or places, excluding active military vessels [SWRCB 2015a], including large containerships, auto carriers, tankers, and other miscellaneous bulk carriers) departed the POLA, an average of 4.9 per day
- 237 harbor craft (including tugboats, crew boats, ferries, and other work boats) actively operated out of the Port.

Marine vessel traffic within and approaching the POLB and POLA is managed through a VTS, operated jointly by the USCG and Marine Exchange of Southern California (MXSocal). Regional vessel traffic is also coordinated using TSSs, defined as a “routing measure aimed at the separation of opposing streams of traffic by appropriate means and by the establishment of traffic lanes” (MXSocal and USCG 2015). The TSS that controls access to and from the POLB is divided into two approaches: western and southern. Each approach has a 1-mile-wide traffic lane, established on each side of the TSS.

The Project site is approximately 9 miles outside of the Southern TSS Inbound Course. Vessel traffic in the nearby area includes: supply and crew boats to four offshore oil platforms: Edith,

Elly, Eureka, and Ellen; recreational boating, including for fishing, whale watching, and SCUBA dive boats.

5.15.3 Significance Thresholds and Criteria

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to transportation and traffic. The issues presented in the Environmental Checklist have been used as thresholds of significance in this section. Accordingly, the Project would have a significant adverse environmental impact if it would:

- Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including, mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit (refer to Impact TRA 5.15-1).
- Conflict with an applicable CMP, including, but not limited to, level of service standards and travel demand measures, or other standards established by the County congestion management agency (Los Angeles County Metropolitan Transportation Agency) for designated roads or highways (refer to Impact TRA 5.15-2).
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks (Refer to Impact TRA 5.15-3).
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) (refer to Impact TRA 5.15-4).
- Result in inadequate emergency access (refer to Impact TRA 5.15-5).
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities (refer to Impact TRA 5.15-6).

In addition to the CEQA Appendix G Checklist questions, the following question based on Appendix G, is analyzed in order to address potential impacts on marine traffic safety:

- Result in marine traffic that reduces the existing level of safety for navigating vessels or increase the potential for marine vessel accidents (refer to Impact TRA 5.15-7).

Methodology

Level of Service

Traffic operations of roadway facilities are described using the term LOS, which is a qualitative description of traffic flow based on several factors, such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined, ranging from LOS “A,” representing completely free-flow conditions, to LOS “F,” representing breakdown in flow resulting in stop-and-go conditions. LOS “E” represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow. **Table 5.15-3** summarizes roadway LOS and intersection volume to capacity (V/C) ratios, as provided in the El Segundo General Plan Circulation Element. It should be noted that the criteria defined in Table 5.15-3 would apply to all roadways where water conveyance pipeline segments would be placed, not just those segments located in the city of El Segundo.

**TABLE 5.15-3
LEVEL OF SERVICE CRITERIA FOR ROADWAYS AND INTERSECTIONS**

Level of Service	Volume/Capacity (V/C)	Delay per Vehicle (seconds)	Description
A	≤10	≤10	Free flow; insignificant delays
B	>10 and ≤20	>10 and ≤20	Stable operation; minimal delays
C	>20 and ≤35	>20 and ≤35	Stable operation; acceptable delays
D	>35 and ≤55	>35 and ≤55	Approaching unstable flow; queues develop rapidly but no excessive delays
E	>55 and ≤80	>55 and ≤80	Unstable operation; significant delays
F	>80	>80	Forced flow; jammed conditions

SOURCE: City of El Segundo 2004.

Level of Service Standards

LOS standards for roadways and intersections potentially affected by Project construction or operation are determined by the Los Angeles County Metro and the City of El Segundo. LOS standards for these agencies are as follows:

- *Los Angeles County CMP* – One CMP intersection, located at Imperial Highway and El Segundo Road, may be potentially affected by traffic generated by the Project. For those intersections identified in the CMP, the lowest acceptable performance standard is LOS E.
- *City of El Segundo General Plan Circulation Element* – As indicated in Circulation Element Policy C3-1.1, the minimum acceptable LOS for Circulation Element roadways is LOS D. For intersections operating at LOS E or F, new development shall not increase the V/C ratio by greater than 2 percent of the existing V/C.
- *City of Manhattan Beach* – The City has established a standard incremental significance threshold to determine if a project would create a significant traffic impact, which are based on the Los Angeles County Traffic Impact Guidelines. The acceptable LOS for the City is LOS D. A project’s impact on an intersection is considered significant if the resulting increase of the Intersection Capacity Utilization value exceeds 0.02 while operating at LOS D or 0.01 while operating at LOS E or F.

Potentially Significant Impacts

The environmental factors determined to be potentially affected by the Project, identified in the Notice of Preparation (see Appendix 1A), are analyzed below. Feasible mitigation measures are recommended, where warranted, to avoid or minimize the Project’s significant adverse impacts.

5.15.4 Impacts and Mitigation Measures

Circulation System

Impact TRA 5.15-1: Would the Project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to

intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland project components for both the Local and Regional Projects. **Table 5.15-4** summarizes the impact significance conclusions.

Local Project

Construction-Related Impacts

The volume of automobile and truck traffic associated with Project-related construction activities would vary throughout the construction phases, as different activities occur. To provide a conservative analysis, the maximum probable concurrent employment on the Project site and maximum concurrent truck activity are included in the construction traffic volumes assumed and evaluated herein.

The following analysis addresses construction-related traffic related to the desalination facility at the ESGS, the screened ocean intake/concentrate discharge facilities at the existing ESGS tunnel termini, and along the proposed desalinated water conveyance pipeline alignments.

**TABLE 5.15-4
 SUMMARY OF IMPACT TRA 5.15-1 CIRCULATION SYSTEM**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact TRA 5.15-1: Impacts regarding the circulation system.			
Local Project			
Construction	LTSM	LTS	LTSM
Operation	LTS	LTS	LTS
Regional Project			
Construction	LTSM	LTS	LTSM
Operation	LTS	LTS	LTS

NOTES:
 LTS = Less than Significant, no mitigation proposed
 LTSM = Less than Significant impact with mitigation

Ocean Water Desalination Facility

Local Project ocean water desalination facility construction would temporarily increase vehicular traffic in the Project area and could result in minor increased traffic delays as a result of construction at either the ESGS North Site or South Site. Construction at the North Site involves demolition of the existing NRG Energy (NRG) Units 3 and 4 and material removal, which could occur during the night for oversized loads. Oversized loads and other heavy-duty vehicles would primarily get to and from the site using main traffic conduits such as Vista Del Mar and Imperial Hwy except for special circumstances to minimize traffic load in residential areas.

Local Project ocean water desalination facility construction would occur concurrent with the screened ocean intake/concentrate discharge structures as well as construction of the conveyance facilities. Some of the employee vehicle trips for all three components could use the same streets, and could use the same streets as truck trips involved in construction of the ocean water desalination facility (soil removal and materials delivery). But, in general, construction worker trips for each of the components would not affect the same streets. **Table 5.15-5** shows the construction assumptions for improvements at the ESGS North and South Sites. Earthwork activities are expected to occur over approximately 15 months, depending on the excavation activities required (overall construction of the desalination facility would occur over an approximate 53-month to 60-month period). The maximum on-site employment during construction would generate approximately 183 daily vehicle trips. In general, maximum truck trips, maximum delivery trips, and maximum on-site construction worker activity would not occur during the same construction phase/activity; however, for purposes of presenting a conservative analysis, maximum truck trips and maximum employee trips are analyzed as if they were to occur during the same construction phase/activity.

To the extent feasible (i.e., if soil is found to be clean), and to the extent imported soil is needed to back fill either the ESGS North Site or South Site, exported soil would be brought back to the site. If this were feasible, soil would be stored nearby in order to reduce truck trip lengths and reduce associated emissions. Potential storage/staging areas include those depicted on Figure 3-21.

As indicated in Table 5.15-5, this analysis conservatively evaluates 314 daily trips as potentially generated during construction, including 184 construction worker trips, 110 material (soil) import/export trips, and 20 delivery trips. Construction worker trips would be expected to occur before 7 AM in the morning and either before 4 PM or after 6 PM in the afternoon and therefore would largely occur outside the peak traffic hours (generally the peak hour of traffic occurs between 7 AM and 9 AM in the morning and 4 PM and 6 PM in the afternoon). Material import/export as well as delivery would be spread across the day, including some minor increases in traffic during peak hours.

For ESGS North, approximately 85,000 cubic yards (CY) of material would be exported; after grading approximately 35,000 CY of this soil (or new soil if the soil is found to be contaminated) would be imported. Each truck carries approximately 16 CY, thus resulting in approximately 7,500 truck trips over approximately 6 months. This equates to approximately 88 trips per day, spread evenly across the day with approximately 8 trips expected to occur during each peak hour.

For ESGS South, approximately 300,000 CY of material would be exported; after grading, approximately 120,000 CY of this soil (or new soil if the soil is found to be contaminated) would be brought back to the site (imported) for backfilling completed structures, requiring approximately 26,250 total trips over 6 months. This equates to approximately 110 trips per day and 10 peak hour trips. The soil export numbers above present a conservative estimate; West Basin would reuse soil on-site to the extent feasible.

Construction worker commute trips and delivery trips would not occur during peak hours.

**TABLE 5.15-5
 LOCAL PROJECT CONSTRUCTION ASSUMPTIONS – OCEAN WATER DESALINATION FACILITY**

Activity	Earthwork (Cubic Yards)	Demo Material Export (Cubic Yards) ²	Material Import/Export Trips/Day ^{1,2}	Worker Trips/Day ^{1,3}	Delivery Trips/Day ¹	Maximum Total Daily Trips
ESGS North Site	85,000 export 35,000 import	80,000	88	184	20	292
ESGS South Site	300,000 export 120,000 import	0	110	184	20	314

NOTES:

- 1 All trips are one-way.
- 2 Material export trips assume 16 cubic yards truck capacity, 11 hours per day (7 AM to 6 PM).
- 3 Worker trips are expected to occur before 7 AM in the morning and either before 4 PM or after 6 PM in the afternoon and would therefore occur outside the peak traffic hours. Worker trips are also conservative estimates and do not account for the Project's proposed use of construction worker shuttles to and from the site, given the extremely constrained site parking available. See Figure 3-21 for staging locations.

SOURCE: GHD 2017; Appendix 3

Access to the ESGS site for construction would continue to be from the existing entry drive along Vista Del Mar; no roadway improvements would be necessary.

Project-related truck trips would use adopted truck routes, including those identified in the El Segundo General Plan Circulation Element Exhibit C-12. Project construction activities are not anticipated to begin until approximately 2021. Truck haul routes would be along Vista Del Mar Boulevard, Imperial Highway, and the I-105. However, this haul route is subject to change based on final design and engineering requirements.

To minimize the effect of additional traffic during construction, **Mitigation Measure TRA-1** requires that West Basin prepare and implement a Traffic Control Plan to ensure traffic is managed to minimize impacts. The Traffic Control Plan would establish construction work hours; lane closure notification procedures; flag person requirements; access and signage requirements for surrounding properties and businesses; and delivery schedules. Implementation of the Traffic Control Plan would minimize the potential for the Project's construction-related traffic to result in traffic delays or impacts on existing circulation patterns and intersection/roadway LOS. Additionally, **Mitigation Measure TRA-2** would require West Basin to prepare a Parking and Staging Plan for all phases of construction.

The nearest major intersection, Vista Del Mar/Grand Avenue (approximately three-quarters of a mile north of the Project site) carries approximately 2,400 AM peak hour trips and operates at LOS D. The Los Angeles County CMP requires the preparation of a TIA when more than 50 trips would be added to peak hour traffic. Construction of the proposed Local Project would not require a TIA since only 10 trips would be added to peak hour traffic.

Although some existing intersections in the roadway network may be operating at unacceptable levels of service, the proposed Project's contribution to the overall volume of traffic would be minor and would not have the potential to trigger local jurisdiction or CMP thresholds.

Based on the above analysis, it is concluded that construction traffic impacts would be less than significant. With implementation of Mitigation Measures TRA-1 and TRA-2, temporary construction-related impacts to traffic/circulation would result in a less than significant impact.

Screened Ocean Intake and Concentrate Discharge

Construction of the intake and discharge facilities would occur offshore. Offshore construction workers would be shuttled to the barges from local marinas; onshore workers would be coordinated with workers at the ocean water desalination facility, which is taken into account Table 5.15-5.

Construction activities associated with these improvements are expected to occur over approximately 36 months. Approximately 20 workers would be engaged offshore during the construction of the intake and discharge facilities. These worker commute trips to the local marinas would not occur during peak hours and would not contribute to peak hour trips on the local roadway network.

Construction activity associated with the screened intake and discharge would not substantially add to the construction traffic generated by construction of the ocean water desalination facility (up to 40 one-way trips per day) and would not result in the Project, when all components are considered together, having the potential to trigger local jurisdiction or CMP thresholds. As a result, impacts would be less than significant.

Desalinated Water Conveyance Components

Construction of the desalinated water conveyance pipelines would occur within roadway ROW, resulting in short-term disturbance of circulation patterns and intersection LOS. Figure 3-5 identifies the preferred pipeline routes as well as alternative routes that may be recommended by local jurisdictions. The Project would require encroachment permits from the local jurisdictions to allow for installation of pipelines. Construction activities associated with the pipeline conveyance system are expected to occur over approximately 30 months, with construction at any one location lasting only a few days.

The Local Project would require up to approximately 9.3 miles (48,900 linear feet) of pipeline installed using open-trench methods. Soils would be excavated, stored on-site or on a temporary staging area, and reused as backfill when possible. Some imported material may be needed for pipe bedding and roadway reconstruction. The construction would proceed at 50–100 feet per day, requiring closure of lanes and parking. Though unlikely, some temporary full-road closures may be necessary. Jack-and-bore pipeline installation methods would be used to minimize traffic disruption within key intersections.

Mitigation Measure TRA-1 requires that West Basin prepare a Traffic Control Plan that would outline requirements necessary to comply with local jurisdictions encroachment permit requirements. This would ensure that pipeline construction activities are consistent with established construction standards. As part of the Project, West Basin would be responsible for repairing roadways to their pre-construction condition consistent with local jurisdiction requirements enforced through encroachment permit conditions. Mitigation Measure TRA-1

would ensure that temporary impacts to public transportation and bike paths were minimized and consistent with local jurisdiction requirements for detours and signage. With implementation of mitigation, impacts would be less than significant.

Construction activity associated with the water conveyance facilities would not substantially add to the construction traffic generated by construction of the ocean water desalination facility (up to 60 trips per day, assuming 30 workers) and would not result in the Project, when all components are considered together, having the potential to trigger local jurisdiction or CMP thresholds.

Mitigation Measures:

Construction of the ocean water desalination facility would require implementation of Mitigation Measures TRA-1 and TRA-2. Construction of the desalinated water conveyance facilities would require implementation of Mitigation Measure TRA-1. No mitigation measures are required for the screened ocean intake and concentrate discharge facilities.

Local Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

Once constructed, the Project would generate nominal operational traffic, that would not require improvements to local roadways. The Local Project ocean water desalination facility (at either the ESGS North Site or ESGS South Site) would operate 24 hours a day, 365 days a year, and would be staffed 24 hours a day. Routine chemical deliveries to the site and hauling of residual materials from the site would occur during normal day-shift working hours, during the traditional work week. The Local Project ocean water desalination facility would employ an anticipated total staff of approximately three shifts of 20 full-time personnel working 8 hours per day, 5 days per week. The full-time staff would generate negligible peak hour traffic (see below), and the off-period staffing would generate no peak hour traffic.

Because of site security considerations for both the desalination facility and NRG, visitors to the site would be infrequent. Overall, conservatively assuming four daily trips per employee and four daily trips for deliveries/maintenance, Local Project ocean water desalination facility operations could generate approximately 120 average daily trips.

It is anticipated that the facility would generate approximately 40 peak hour trips (20 AM peak hour trips, 20 PM peak hour trips; neither visitors nor deliveries would be expected during the peak hour). By comparison, the nearest major intersection, Vista Del Mar/Grand Avenue (approximately three-quarters of a mile north of the Project site) carries approximately 2,400 AM peak hour trips and operates at LOS D. As a result of Local Project operations, approximately 20 AM peak hour trips would be added to Vista Del Mar/Grand Avenue, which represents less than 1 percent of the AM peak hour existing intersection volume.

Therefore, Local Project ocean water desalination facility operations would not have the potential to significantly impact LOS and the Project would not have the potential to conflict with an

applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. Furthermore, the minor increase in staff, visitors, and deliveries to the ESGS site would not have the potential to substantially increase vehicle miles traveled (i.e., total, or per capita, or per service population). A less than significant impact to the circulation system would occur.

Screened Ocean Intake and Concentrate Discharge

The Local Project intake and discharge facilities would require periodic inspection and maintenance. These activities would not require routine staffing that would have the potential to generate substantial new traffic in the area or significantly impact LOS at local intersections. A less than significant impact to the circulation system would occur.

Desalinated Water Conveyance Components

The Local Project intake and discharge facilities would require periodic maintenance. These activities would not require routine staffing and would not have the potential to generate substantial new traffic in the area or significantly impact LOS at local intersections. A less than significant impact to the circulation system would occur.

Mitigation Measures:

None Required.

Local Project Significance Determination:

Less than Significant Impact.

Regional Project

The following analysis addresses construction-related traffic for the desalination facility at the ESGS, the screened ocean intake/concentrate discharge facilities at the existing ESGS tunnel termini, and along the proposed desalinated water conveyance pipeline alignments.

Construction-Related Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

Similar to the Local Project, construction of the Regional Project would add to existing traffic. The Regional Project ocean water desalination facility construction at the ESGS South Site would require excavation and export of an additional 65,000 CY (beyond that estimated above for the Local Project), with a negligible amount being returned to the site for backfill purposes, and construction at the ESGS North Site would require additional excavation and export of 40,000 CY of material, approximately 4,000 CY of which would be returned to the site (imported) for use as backfill. Similar to the Local Project, construction would generate approximately 184 daily worker commute trips.

As indicated in **Table 5.15-6**, up to 248 daily one-way trips would be generated during this Regional Project construction phase, including an estimated 184 worker trips, 44 material (soil) import/export trips, and 20 deliveries. Using the same analysis methodology described above for the Local Project, this would represent approximately two AM peak hour and two PM peak hour truck trips, which would not result in a measureable increase in delay or degradation of LOS on

nearby roadways or intersections. As noted for the Local Project, construction worker hours generally would not coincide with local commuter traffic peak hours and could be further minimized by providing off-site construction worker shuttles to and from the ESGS site.

Even when considered in combination with Local Project operations (an additional 40 peak hour trips), construction traffic from the Regional Project would still represent less than 1 percent of the AM peak hour existing intersection volume at the nearest intersection, Vista Del Mar/Grand Avenue.

Similar to the Local Project, Regional Project ocean water desalination facility construction would not have the potential to conflict with an applicable plan, policy, or measure of effectiveness for performance of the circulation system. With implementation of Mitigation Measures TRA-1 and TRA-2, temporary Regional Project ocean water desalination facility construction impacts would be reduced to a less than significant level.

Screened Ocean Intake and Concentrate Discharge

Similar to the Local Project, construction of the offshore components of the Regional Project would not generate traffic sufficient to significantly impact local intersections or roadway capacities. Workers would be shuttled to the offshore construction areas from local marinas. Nor would the Project conflict with an applicable plan, policy, or measure of effectiveness for the performance of the circulation system. Construction impacts would be less than significant.

**TABLE 5.15-6
 REGIONAL PROJECT CONSTRUCTION ASSUMPTIONS – OCEAN WATER DESALINATION FACILITY**

Activity	Earthwork (Cubic Yards)	Material Import/Export Trips/Day ^{1,2}	Worker Trips/Day ^{1,3}	Delivery Trips/Day ¹	Maximum Total Daily Trips
ESGS North Site	65,000 export	44	184	20	248
ESGS South Site	40,000 export 4,000 import	33	184	20	237

NOTES:

- 1 All trips are one-way.
- 2 Material export trips assume 16 cubic yards truck capacity, 11 hours per day (7 AM to 6 PM).
- 3 Worker trips are expected to occur before 7 AM in the morning and either before 4 PM or after 6 PM in the afternoon and would therefore occur outside the peak traffic hours. Worker trips are conservative estimates and do not account for the Project's proposed use of construction worker shuttles to and from the site, given the extremely constrained site parking available. See Figure 3-21 for staging locations.

SOURCE: GHD 2017; Appendix 3

Desalinated Water Conveyance Components

Similar to the Local Project, construction methods for the Regional Project would include open-trench and jack-and-bore methods that would temporarily impact traffic through lane closures and potential full-road closures. The Regional Project would require encroachment permits from the local jurisdictions to allow for installation of pipelines and pump stations. The Regional Project would add approximately 4.9 miles (25,800 linear feet) of pipeline construction. As with the Local Project, although traffic would be affected by construction, the additional traffic from worker commute and material deliveries would not significantly increase traffic volume to the local roadway network. Temporary delays and congestion resulting from lane closures would be minimized through implementation of Mitigation Measure TRA-1. the temporary construction

impacts for the Regional Project desalinated water conveyance components would be reduced to less than significant with implementation of mitigation measures.

Mitigation Measures:

The ocean water desalination facility would require implementation of Mitigation Measures TRA-1 and TRA-2. The desalinated water conveyance facilities would require implementation of Mitigation Measure TRA-1. No mitigation measures are required for the screened ocean intake and concentrate discharge facilities.

Regional Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

Staffing for Regional Project operations would be similar to the Local Project, requiring up to four additional employees (24 total). Conservatively assuming four daily trips per employee and four additional daily trips for deliveries/maintenance, Regional Project ocean water desalination facility operation would generate approximately 100 average daily trips and approximately 48 peak hour trips (assuming each employee commute was in the peak hour: 24 AM peak hour trips, 24 PM peak hour trips).

As discussed above for the Local Project, the nearest major intersection, Vista Del Mar/Grand Avenue (approximately three-quarters of a mile north of the Project site) carries approximately 2,400 AM peak hour trips and operates at LOS D. The additional five AM and PM peak hour trips would represent approximately 1 percent of the AM peak hour existing intersection volume at Vista Del Mar/Grand. Therefore, Regional Project ocean water desalination facility operations would not significantly impact LOS and the Project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. A less than significant impact would occur.

Screened Ocean Intake and Concentrate Discharge

Similar to the Local Project, the Regional Project intake and discharge facilities would require periodic maintenance. These activities would not require routine staffing that would generate substantial new traffic in the area or significantly impact LOS at local intersections. A less than significant impact would occur.

Desalinated Water Conveyance Components

The Regional Project intake and discharge facilities would require periodic maintenance. These activities would not require routine staffing and would not have the potential to generate substantial new traffic in the area or significantly impact LOS at local intersections. A less than significant impact to the circulation system would occur.

Mitigation Measures

None Required.

Regional Project Significance Determination:

Less than Significant Impact.

Mitigation Measures

The following mitigation measures apply to both the Local and Regional Projects, unless otherwise noted.

TRA-1: Prior to construction within the ESGs and on local roadways, West Basin shall prepare a Construction Traffic Control Plan that addresses the following:

- Identify timing of heavy equipment and building materials deliveries.
- Identify methods of redirecting traffic with a flag person.
- Identify signing, lighting, and traffic control device placement if required.
- Identify need for construction work hours and arrival/departure times outside of peak traffic periods.
- Ensure emergency services providers are notified of lane closures and ensure that access is maintained for emergency vehicles at each construction site and adjacent land uses.
- Identify temporary travel lane closure.
- Identify temporary restriping requirements.
- Identify temporary traffic detours, bike path detours, and bus stop relocations.
- Maintain access to adjacent properties during construction.
- Specify construction-related haul routes.
- Identify safety procedures for exiting and entering the site access gate.

TRA-2: During Project construction, West Basin shall develop and implement a Parking and Staging Plan for all phases of construction to enforce a policy that all Project-related parking occurs on-site or in predesignated off-site parking areas. The contractor shall use shuttles to transport workers to and from off-site staging/parking areas and Project construction areas.

Congestion Management Program

Impact TRA 5.15-2: Would the Project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland project components for both the Local and Regional Projects. **Table 5.15-7** summarizes the impact significance conclusions.

**TABLE 5.15-7
 SUMMARY OF IMPACT TRA 5.15-2 CONGESTION MANAGEMENT PROGRAM**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact TRA 5.15-2: Impacts regarding conflicts with a congestion management program.			
Local Project			
Construction	LTSM	LTSM	LTSM
Operation	LTS	LTS	LTS
Regional Project			
Construction	LTSM	LTSM	LTSM
Operation	LTS	LTS	LTS

NOTES:
 LTS = Less than Significant, no mitigation proposed
 LTSM = Less than Significant impact with mitigation

Local Project

Construction-Related Impacts

All Project Components

The Local Project construction trips are detailed under Impact TRA 5.15-1. Based on these estimated construction trips and the CMP Traffic Impact TIA criteria (see 2010 Los Angeles County Congestion Management Program section above), the Project’s peak hour construction truck trips (less than 10) falls well below the CMP threshold of 50 peak hour trips. Construction worker hours generally would not coincide with local commuter traffic peak hours and would be further minimized by providing off-site construction worker shuttles to and from the ESGS site. Compliance with Mitigation Measures TRA-1 and TRA-2 would require the preparation of a Traffic Control Plan that would ensure Local Project construction would result in a less than significant impact.

Mitigation Measures:

Implement Mitigation Measures TRA-1 and TRA-2.

Local Project Significance Determination

Less than Significant with Mitigation Incorporated.

Operational Impacts

All Project Components

The Local Project operational trips are detailed under Impact TRA 5.15-1. Based on these estimated operational trips and the CMP TIA criteria, a TIA is not required. Therefore, no further highway or freeway system analysis need be conducted. Local Project operations would result in a less than significant impact.

Mitigation Measures:

None Required.

Local Project Significance Determination:

Less than Significant Impact.

Regional Project

Construction-Related Impacts

All Project Components

The Regional Project construction trips are detailed under Impact TRA 5.15-1, and would generally be similar or fewer than what is discussed for the Local Project above, due to overall similar daily construction trips and less total construction time. Based on these estimated construction trips and the CMP threshold of 50 peak hour trips (see 2010 Congestion Management Program section above), no further analysis of CMP facilities is required. Compliance with Mitigation Measures TRA-1 and TRA-2 would ensure Regional Project construction would result in a less than significant impact in this regard.

Mitigation Measures

Implement Mitigation Measures TRA-1 and TRA-2.

Regional Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

All Project Components

The Regional Project operational trips are detailed under Impact TRA 5.15-1. Based on these estimated operational trips and the CMP TIA criteria, no CMP facilities have been identified for study. Therefore, no further highway or freeway system analysis will need to be conducted. Regional Project operations would result in a less than significant impact in this regard.

Mitigation Measures

None Required.

Regional Project Significance Determination:

Less than Significant Impact.

Air Traffic

Impact TRA 5.15-3: Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland project components for both the Local and Regional Projects. **Table 5.15-8** summarizes the impact significance conclusions.

**TABLE 5.15-8
SUMMARY OF IMPACT TRA 5.15-3 AIR TRAFFIC**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact TRA 5.15-3: Impacts to air traffic patterns.			
Local Project			
Construction	NI	NI	NI
Operation	NI	NI	NI
Regional Project			
Construction	NI	NI	NI
Operation	NI	NI	NI

NOTES:

NI = No Impact, no mitigation proposed

Local and Regional Projects

Construction-Related and Operational Impacts

All Project Components

The Project involves a desalination facility that would produce 20 MGD of potable drinking water (Local Project) and the potential expansion of the facility to produce up to 60 MGD (Regional Project). The facility is proposed at ESGS, which is located approximately 2.5 miles southwest of LAX and approximately 5 miles west of Hawthorne Municipal Airport. The Project involves no residential development and a nominal increase in employment. Given the Project’s nature, scope, and location, any increased travel would not be such that a change in air traffic patterns would occur. Further, the Airport Influence Areas delineated for these two airports as part of the *Los Angeles County Airport Land Use Plan* (Los Angeles County Airport Land Use Commission 2004) do not identify the Project site as being located in a Runway Protection Zone or in an area of concern for aircraft noise. Therefore, Project construction and operations would not result in a substantial safety risk associated with increased travel. No impact would occur in this regard.

Mitigation Measures

None Required.

Local and Regional Project Significance Determination

No Impact.

Mitigation Measures

None Required.

Increase in Safety Hazards

Impact TRA 5.15-4: Would the Project substantially increase safety hazards?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland project components for both the Local and Regional Projects. **Table 5.15-9** summarizes the impact significance conclusions.

**TABLE 5.15-9
 SUMMARY OF IMPACT TRA 5.15-4 INCREASE IN SAFETY HAZARDS**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact TRA 5.15-4: Impacts resulting in safety hazards.			
Local Project			
Construction	NI	NI	NI
Operation	NI	NI	NI
Regional Project			
Construction	NI	NI	NI
Operation	NI	NI	NI

NOTES:
 NI = No Impact, no mitigation proposed

Local and Regional Projects

Construction-Related and Operational Impacts

All Project Components

The Project does not propose a transportation-related design feature or incompatible use that would increase transportation-related hazards. Further, no off-site improvement would be required to ensure that adequate access is provided to the ocean water desalination facility. An access road to the desalination facility site would be constructed from the existing access road within the ESGS site, and would require all vehicles and visitors to pass through the existing ESGS guarded entry gate. Similarly, all screened ocean intake and concentrate discharge facilities onshore construction and operations would occur entirely within the ESGS and/or below grade. Desalinated water conveyance components construction and operations would occur within industrial and fully urbanized areas, within roadway ROW, and/or within an enclosure. Therefore, Project construction and operations would not increase hazards as a result of a design feature or incompatible uses. No impact would occur in this regard.

Mitigation Measures

None Required.

Local and Regional Project Significance Determination

No Impact.

Emergency Access

Impact TRA 5.15-5: Would the Project result in inadequate emergency access?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland project components for both the Local and Regional Projects. **Table 5.15-10** summarizes the impact significance conclusions.

**TABLE 5.15-10
 SUMMARY OF IMPACT TRA 5.15-5 EMERGENCY ACCESS**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact TRA 5.15-5: Impacts resulting in safety hazards.			
Local Project			
Construction	LTSM	LTS	LTSM
Operation	NI	NI	NI
Regional Project			
Construction	LTSM	LTS	LTSM
Operation	NI	NI	NI
NOTES: NI = No Impact, no mitigation proposed LTS = Less than Significant, no mitigation proposed LTSM = Less than Significant impact with mitigation			

Local Project

Construction-Related Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

Construction of the ocean water desalination facility at the ESGS site would not involve activities within roadways or road shoulders that could block access of emergency vehicles. Mitigation Measure TRA-1 requires that West Basin prepare a Traffic Control Plan to ensure that emergency access is maintained during construction. With implementation of Mitigation Measure TRA-1, a less than significant impact would occur.

Screened Ocean Intake and Concentrate Discharge

Offshore construction would not interfere with emergency access. Offshore emergency services would be provided by the USCG. Impacts would be less than significant.

Desalinated Water Conveyance Components

Construction of the Local Project water conveyance system would temporary block traffic lanes and could result in full-road closures. Mitigation Measure TRA-1 would ensure that local emergency providers were notified of the closures and access maintained for all local residents and businesses. With implementation of TRA-1, impacts would be less than significant.

Mitigation Measures:

Implement Mitigation Measure TRA-1 for the ocean water desalination facility and the desalinated water conveyance components. No mitigation measures are required for the screened ocean intake and concentrate discharge facilities.

Local Project Significance Determination

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

All Project Components

Once constructed, the Project facilities would be accessible to emergency providers and would not interfere with emergency access. No impact would occur.

Mitigation Measures:

None Required.

Local Project Significance Determination

No Impact.

Regional Project

Construction-Related Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

Similar to the Local Project, with implementation of Mitigation Measure TRA-1, impacts to emergency services would be less than significant.

Screened Ocean Intake and Concentrate Discharge

Similar to the Local Project, impacts to emergency services would be less than significant.

Desalinated Water Conveyance Components

Similar to the Local Project, with implementation of Mitigation Measure TRA-1, impacts to emergency services would be less than significant.

Mitigation Measures

Implement Mitigation Measure TRA-1 for the ocean water desalination facility and the desalinated water conveyance components. No mitigation measures are required for the screened ocean intake and concentrate discharge facilities.

Regional Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

All Project Components

Once constructed, the Project facilities would be accessible to emergency providers and would not interfere with emergency access. No impact would occur.

Mitigation Measures

None Required.

Regional Project Significance Determination

No Impact.

Public Transit, Bicycle, Or Pedestrian Facilities

Impact TRA 5.15-6: Would the Project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland project components for both the Local and Regional Projects. **Table 5.15-11** summarizes the impact significance conclusions.

**TABLE 5.15-11
 SUMMARY OF IMPACT TRA 5.15-6 PUBLIC TRANSIT, BICYCLE, OR PEDESTRIAN FACILITIES**

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact TRA 5.15-6: Impacts to public transit, bicycle, or pedestrian facilities.			
Local Project			
Construction	LTSM	NI	LTSM
Operation	NI	NI	LTS
Regional Project			
Construction	LTSM	NI	LTSM
Operation	NI	NI	LTS

NOTES:
 NI = No Impact, no mitigation proposed
 LTS = Less than Significant, no mitigation proposed
 LTSM = Less than Significant impact with mitigation

Local Project

Construction-Related Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

A number of public transit facilities exist in the Project area (e.g., bicycle paths, bus stops). Construction of the Local Project ocean water desalination facility would occur almost entirely within the ESGS, thereby reducing the potential for disruption of public transit, with the exception of construction of the access gate replacement and other components such as pipelines adjacent to the Marvin Braude Coastal Bike Trail. Although the bike trail would not be permanently impacted, construction activities would occur adjacent to the bike trail for several weeks. With implementation of Mitigation Measure TRA-1, construction of the Local Project ocean water desalination facility construction would conform to adopted policies, plans, or

programs regarding public transit, bicycle, or pedestrian facilities. Additionally, as discussed in Section 5.14, *Recreation*, Mitigation Measure REC-1 requires that West Basin coordinate with the appropriate city/county department (Los Angeles County Department of Public Works and the City of El Segundo) to minimize interruptions or alterations of the bike trail and to ensure it is restored to its original condition. As a result, public transit, bicycle, or pedestrian facilities would not be significantly affected during the construction phases of the ocean water desalination facility. The project would not decrease the performance or safety of such facilities. Impacts would be less than significant with mitigation.

Screened Ocean Intake and Concentrate Discharge

Construction offshore would not affect public transit facilities. No impacts would occur.

Desalinated Water Conveyance Components

A number of public transit facilities exist in the Project area (e.g., bicycle paths, bus stops). Construction of the Local Project desalinated water conveyance components would have the potential to disrupt such facilities resulting in the temporary disruption, relocation, or closure of such facilities. Impacts may also occur as a result of construction equipment and vehicles traveling on roadways to and from construction areas. With implementation of Mitigation Measure TRA-1, measures would be implemented to minimize impacts to public transit and bike paths in conformance with local jurisdiction encroachment permit requirements. Construction would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Impacts would be less than significant with implementation of Mitigation Measure TRA-1.

Mitigation Measures:

Implement Mitigation Measure TRA-1 and REC-1 for impacts to the ocean water desalination facility. Implement Mitigation Measure TRA-1 for impacts to the desalinated water conveyance components. No mitigation is required for the screened ocean intake and concentrate discharge.

Local Project Significance Determination

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

Local Project ocean water desalination facility operations would occur entirely within ESGS boundaries and therefore would not involve any activities that would have the potential to conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. No off-site roadway improvements are proposed that would involve permanent disruption or loss of public transportation facilities. No impact would occur.

Screened Ocean Intake and Concentrate Discharge

Local Project screened ocean intake and concentrate discharge operations would occur in the ocean. Therefore, Local Project screened ocean intake and concentrate discharge operations would not involve any activities that would have the potential to conflict with adopted policies,

plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. No impact would occur.

Desalinated Water Conveyance Components

Local Project desalinated water conveyance components operations would occur underground. Local Project desalinated water conveyance facilities periodic maintenance may require temporary disturbance with the certain roadway ROW. However, all such activities would be subject to requirements of the affected jurisdictions to ensure that no conflicts with transportation policies, plans, or programs occur. Therefore, impacts would be less than significant.

Mitigation Measures

None Required.

Local Project Significance Determination

Less than Significant Impact.

Regional Project

Construction-Related Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

Similar to the Local Project, construction of the Regional Project ocean water desalination facility construction could temporarily affect public transit, bicycle, or pedestrian facilities. With implementation of Mitigation Measure TRA-1 and REC-1, impacts would be less than significant.

Screened Ocean Intake and Concentrate Discharge

Similar to the Local Project, no impacts would occur to public transit from offshore construction.

Desalinated Water Conveyance Components

Similar to the Local Project, the Regional Project desalinated water conveyance components construction would have the potential to disrupt alternative transportation facilities and/or public transit services where improvements are proposed within the ROW and may result in the temporary disruption, relocation, or closure of such facilities. With implementation of Mitigation Measure TRA-1, impacts would be less than significant.

Mitigation Measures:

Implement Mitigation Measure TRA-1 and REC-1 for impacts to the ocean water desalination facility. Implement Mitigation Measure TRA-1 for impacts to the desalinated water conveyance components. No mitigation is required for the screened ocean intake and concentrate discharge.

Regional Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

Similar to the Local Project, the Regional Project ocean water desalination facility operations would occur entirely within ESGS boundaries and thus would not involve any activities that would have the potential to conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. No off-site roadway improvements are proposed that would involve permanent disruption or loss of alternative transportation facilities within the City's (or any other jurisdictions') established networks. No impact would occur.

Screened Ocean Intake and Concentrate Discharge

Similar to the Local Project, offshore facilities would not impact public transit. No impact would occur.

Desalinated Water Conveyance Components

Similar to the Local Project, Regional Project desalinated water conveyance components operations would occur underground. Periodic maintenance of Regional Project desalinated water conveyance facilities may require temporary disturbance with the roadway ROW. However, all such activities would be subject to requirements of the affected jurisdictions to ensure that no conflicts with alternative transportation policies, plans, or programs occur. Therefore, Impacts would be less than significant.

Mitigation Measures

None Required.

Regional Project Significance Determination

Less than Significant Impact.

Marine Vessel Safety

Impact TRA 5.15-7: Would the Project result in the potential to reduce the existing level of safety for navigating vessels or increase the potential for marine vessel accidents?

The following analysis evaluates potential impacts associated with constructing and operating each of the three primary elements of the Project, including offshore, coastal, and inland project components for both the Local and Regional Projects. **Table 5.15-12** summarizes the impact significance conclusions.

TABLE 5.15-12
SUMMARY OF IMPACT TRA 5.15-7 MARINE VESSEL SAFETY

	Ocean Water Desalination Facility	Offshore Intake and Discharge Facilities	Inland Conveyance Facilities
Impact TRA 5.15-7: Impacts to marine vessel safety.			
Local Project			
Construction	NI	LTSM	NI
Operation	NI	LTS	NI
Regional Project			
Construction	NI	LTSM	NI
Operation	NI	LTS	NI

NOTES:

NI = No Impact, no mitigation proposed

LTS = Less than Significant, no mitigation proposed

LTSM = Less than Significant impact with mitigation

Local Project

Construction-Related Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

Construction of the ocean water desalination facility would not generate marine vessel traffic. As such, no impact would occur to marine traffic.

Screened Ocean Intake and Concentrate Discharge

As described in Section 3, *Project Description*, and Section 5.11, *Marine Biological Resources*, installation of the diffusers and wedgewire screens would generate marine vessel traffic between the POLB/POLA, Marina Del Rey and the Project offshore work site. Construction would require a derrick barge with a crane on deck, which would be the largest piece of marine equipment required for construction. The intake screens and outfall diffusers would be transported out to the derrick barge from the POLA/POLB, and would likely require three to four tug boat round trips that would occur over the course of several days. Smaller crew and supply vessels from the POLA/POLB or closer harbors (e.g., Marina del Rey) would shuttle workers to the offshore work site two times daily, and additional trips may be needed to deliver equipment and supplies, and perform environmental monitoring. These trips would have a minimal effect on existing boat traffic during the short-term construction period. As a result, Project construction would not require any change to local ports, the regional VTS, other established marine traffic systems in the area, or existing aids to navigation. Impacts would be less than significant.

Vessel traffic offshore would be confined to the area directly surrounding the intake and discharge towers and to and from the POLB/POLA and Marina Del Rey. Vessels transiting to and from the offshore Project area during Project construction must meet USCG requirements for navigation safety (e.g., navigation systems, minimum crew, and COLREGS [International Regulations for Preventing Collisions at Sea] day shapes and night lights), and vessel operators would communicate with the USCG and VTS where applicable. Project activities are not likely to

reduce the existing level of safety for navigating marine vessels in and around the POLB/POLA and Marina Del Rey because of the small vessel sizes, small number of trips per day, use of existing vessel traffic services for coordinating movements into and out of the harbor/ports/marina, and short-term duration of construction. Thus, potential impacts at and transiting to and from the POLB/POLA and Marina Del Rey would be less than significant.

Temporary anchoring cans and buoys would be used during construction activities to denote the location of anchors in the offshore area. Mitigation Measure HAZ-3 would require the preparation of an Anchoring Plan to ensure marine vessels are moored effectively and safely. Additionally, Mitigation Measure HAZ-4 would cover safety measures needed for marine construction activities, including a precise set of procedures and protocols that will be used by the marine contractors during the marine portions of the construction work, with a focus on personal, environmental, and vessel safety. With implementation of mitigation measures, impacts resulting from anchoring activities and to marine vessel safety would be reduced to less than significant levels.

At the screened ocean intake and concentrate discharge locations, vessel safety could be further increased with the publication of a Local Notice to Mariners to ensure that other vessels in the area, as well as the USCG and area harbor personnel, would be advised of the location of moored vessels, likely transit routes, and approximate dates, durations, and working hours. Noticing would provide for advanced planning and would ensure coordination with any other activities that are ongoing or planned. The USCG has a Local Notice to Mariners program and publishes weekly emails and notices for each USCG District (California is District 11). The Local Notice to Mariners addresses discrepancies in navigational aids (charts, etc.), advanced notices of projects (such as dredging, etc.), and other areas of potential concern (surveys, fireworks displays, sunken ships, etc.). Mitigation Measure HAZ-3 includes a requirement to post a Local Notice to Mariners. With implementation of Mitigation Measure HAZ-3, impacts to vessel transit routes would be reduced to a less than significant level.

Desalinated Water Conveyance Components

Construction of the desalinated water conveyance components would not generate marine vessel traffic. As such, no impact would occur to marine traffic.

Mitigation Measures:

Implement Mitigation Measures HAZ-3 and HAZ-4 for impacts to the screened ocean intake and concentrate discharge. No mitigation is required for other facilities.

Local Project Significance Determination:

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

Operation of the ocean water desalination facility would not generate marine vessel traffic. As such, no impact would occur to marine traffic.

Screened Ocean Intake and Concentrate Discharge

Upon completion of construction, the tops of the modified intake and discharge structures would be at approximately the same depth as the existing structures below the ocean surface at low water conditions. The intake and discharge risers (towers) on the ends of the existing ESGS pipelines are approximately 13 feet below the surface of the ocean during low water conditions. These risers are located in waters sufficiently deep to vessel traffic that normally operate in areas with water depths of approximately 28 to 32 feet below the low water. Prior to installation of the screens and diffuser, the tops of the risers would be demolished and lowered to accommodate the screens and diffuser. Normal vessel traffic that operates in the offshore area would not be impacted by the height of the risers or other intake or discharge structures. As a result, impacts would be less than significant regarding marine vessel safety during operation.

Operation of the Local Project screened ocean intake and concentrate discharge facilities would require periodic inspections of the submerged components by boat. The diffuser would require quarterly dives to ensure its proper operation. Periodic maintenance trips, estimated at less than one per month or 11 dives per year, would also be made to clean the intake screens and maintain the facilities. The periodic maintenance trips associated with diffuser and screen inspection and cleaning would not result in a significant impact to marine vessel safety. As a result, impacts would be less than significant.

Desalinated Water Conveyance Components

Operation of the desalinated water conveyance components would not generate marine vessel traffic. As such, no impact would occur to marine traffic.

Mitigation Measures:

None Required.

Local Project Significance Determination:

Less than Significant Impact.

Regional Project

Construction-Related Impacts

Ocean Water Desalination Facility – ESGS North and South Sites

Construction of the ocean water desalination facility would not generate marine vessel traffic. As such, no impact would occur to marine traffic.

Screened Ocean Intake and Concentrate Discharge

To reduce the amount of offshore construction impacts associated with the Project, the majority of the necessary infrastructure to support the Regional Project would be installed at the same time the Local Project infrastructure is installed. However, some equipment would be added to the Local Project facilities. As part of the Regional Project, additional screens would be installed on the risers by divers. This would eliminate the need for the extensive underwater installation involved with the Local Project. Small boats would still be required to install the screens, and would be required to adhere to Mitigation Measures HAZ-3 and HAZ-4. With implementation of mitigation measures, impacts would be reduced to a less than significant level.

Desalinated Water Conveyance Components

Construction of the desalinated water conveyance components would not generate marine vessel traffic. As such, no impact would occur to marine traffic.

Mitigation Measures:

Implement Mitigation Measures HAZ-3 and HAZ-4 for impacts to the screened ocean intake and concentrate discharge. No mitigation is required for other facilities.

Determination:

Less than Significant Impact with Mitigation Incorporated.

Operational Impacts

Ocean Water Desalination Facility – ESGs North and South Sites

Operation of the ocean water desalination facility would not generate marine vessel traffic. As such, no impact would occur to marine traffic.

Screened Ocean Intake and Concentrate Discharge

The operation and maintenance activities for the Regional Project would be similar to the Local Project described under Impact TRA 5.15-7. Impacts would be less than significant.

Desalinated Water Conveyance Components

Operation of the desalinated water conveyance components would not generate marine vessel traffic. As such, no impact would occur to marine traffic.

Mitigation Measures:

None Required.

Regional Project Significance Determination:

Less than Significant Impact.

5.15.5 Cumulative Impacts

For purposes of transportation impact analysis, cumulative impacts are considered for cumulative development in the Santa Monica Bay area, according to the related projects. Table 4-1, *Cumulative Projects List*, lists past, present, and probable future development projects that have the potential to contribute to cumulative impacts when combined with the Project.

Planned or future projects in the Project area consist of various types of development projects, including residential, commercial, and/or industrial development. Concurrent construction of the proposed Project with other related projects would contribute to cumulative impacts to transportation and traffic in the Project Area. Several intersections on El Segundo Boulevard are projected to be significantly impacted, including at Sepulveda Boulevard, Douglas Street, and Aviation Boulevard, which are intersections where construction of the desalinated water pipeline could occur; refer to Figure 3-5. Mitigation Measure TRA-1 requires the preparation of a Traffic Control Plan and Mitigation Measure TRA-2 requires a parking and staging plan to reduce traffic impacts during construction. The Project would include trenchless construction if necessary to

minimize disruption to busy intersections during peak hours as determined in the required encroachment permits.

Cumulative development with the potential to impact traffic and transportation is generally required to demonstrate compliance with applicable federal and state regulatory requirements, including RTP/SCS goals and policies of the affected jurisdiction intended to reduce and/or avoid potential adverse environmental effects. As such, cumulative impacts to traffic and transportation would be mitigated on a project-by-project level, and in accordance with the established regulatory framework, through the established regulatory review process.

As discussed in detail above, all Project impacts would be mitigated to less than significant levels. The thresholds of significance for impacts to traffic are the same for Project-specific impacts and what constitutes a cumulatively considerable contribution; therefore, since the Project would not have the potential to result in project-specific impacts, the Project would not have the potential to result in a cumulatively considerable contribution to cumulative impacts.

See Section 4.3 *2016 RTP/SCS Buildout* for a discussion of cumulative impacts in the region. See also Section 6.2.3 Population Growth for a discussion of the Project's consistency with the 2016 RTP/SCS.

The number of vessels required for the Project is small compared to the number of existing calls at the POLB (POLB 2015), POLA (POLA 2015), and existing marine vessel traffic in the area. Thus, vessel traffic associated with the Project would not result in a cumulatively considerable contribution to a marine traffic impact in the Project Area.

5.15.6 Significant Unavoidable Impacts

No significant unavoidable impacts to traffic and transportation have been identified following compliance with implementation of Mitigation Measures TRA-1, TRA-2, HAZ-3, and HAZ-4.

5.15.7 Sources Cited

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