

## 4.17 TRAFFIC AND TRANSPORTATION

Sections	Tables	Figures
4.17.1 Introduction	4.17-1 Characteristics of Roadways in the Vicinity of the Proposed Project, By Component	4.17-1 Regional Transportation Network
4.17.2 Environmental Setting		4.17-2 Salinas and Monterey County Transportation Network
4.17.3 Regulatory Framework	4.17-2 Level of Service (LOS) Definitions	4.17-3 Northern Monterey County Transportation Network
4.17.4 Impacts and Mitigation Measures	4.17-3 Applicable State, Regional and Local Land Use Plans and Policies Relevant to Traffic and Transportation	4.17-4 Marina Transportation Network
4.17.5 References	4.17-4 Construction Traffic Assumptions for all Proposed Project Components	4.17-5 Seaside Transportation Network
	4.17-5 Summary of Impacts Traffic and Transportation	4.17-6 Monterey Transportation Network
	4.17-6 Estimated Maximum Daily Construction Vehicle Trips	
	4.17-7 Major Roads Utilized During Construction	

### 4.17.1 Introduction

The Traffic and Transportation section identifies existing conditions within the Proposed Project area, including existing roadway networks, traffic conditions, bicycle and pedestrian networks, public transit, and emergency access, as well as an overview of relevant federal, state, and local transportation regulations. The impact section evaluates construction and operational impacts of the Proposed Project and presents mitigation measures as necessary. Cumulative traffic and transportation impacts are also evaluated in this section.

The analysis in this section is based on estimates of: construction workers and vehicle trips associated with construction and operation of the various components of the Proposed Project; California Department of Transportation (Caltrans) data on state highway traffic volumes; Transportation Agency for Monterey County (TAMC) data on local roadway traffic volumes; traffic data available from other jurisdictions; field reconnaissance; and review of available maps of transit routes, bike routes, and recreational paths.

Public and agency comments related to traffic and transportation received during the public scoping period in response to the Notice of Preparation are summarized below.

- Concern about construction equipment on park roads and trails, traffic control needs and impacts to natural resources.
- Describe construction staging areas and temporary construction impacts.
- Provide information regarding traffic control and coordinate construction with the City of Seaside on implementation of the underground pipeline within the City.

To the extent that issues identified in public comments involve potentially significant effects on the environment according to the California Environmental Quality Act (CEQA) and/or are raised by responsible agencies, they are identified and addressed within this EIR. For a complete list of public comments received during the public scoping period, refer to **Appendix A, Scoping Report**.

## 4.17.2 Environmental Setting

The Proposed Project includes facilities in the cities of Salinas, Marina, Seaside, Monterey, and Pacific Grove and in a portion of the unincorporated portion of Monterey County north and east of Marina. Construction workers, construction vehicles and permanent employees and maintenance crews would use regional highways and local roadways to access the Proposed Project sites.

The regional transportation network in **Figure 4.17-1**, shows the major roadways, highways, railroads and airports within the entire Proposed Project area. A more detailed view of the local roadways and transit facilities in the area of each component are shown in **Figures 4.17-2 through 4.17-6**. Further description of regional and local roadways is provided below.

### 4.17.2.1 Regional and Local Roadways and Traffic Operations

Regional transportation within Monterey County and within the project area is supported by a system of highways, including U.S. Highway 101 (Highway 101) and several state routes (Highways 1, 68, 156, 183, and 218). All highways are all shown on **Figure 4.17-1, Regional Transportation Network**. A brief description is provided below, and the most recent annual Average Daily Traffic volumes published by Caltrans are identified.

#### Regional Highways

**US Highway 101** provides the primary north-south interregional travel route in Monterey County and through the Salinas Valley and consists of two lanes in each direction. The most recent data published by Caltrans indicates the average daily traffic volume on Highway 101 ranges from about 84,000 vehicles north of the Highway 156 interchange; from 59,000 to 74,000 vehicles between Highway 156 and Highway 68; and about 58,000 vehicles south of Highway 68 (California Department of Transportation, 2013).

**State Route 1** (Highway 1) is a four-lane divided freeway with ramp interchanges between Marina and the southern limits of the city of Monterey. Traffic on Highway 1 travels through the western portion of the Proposed Project area. Highway 1 provides a majority of the access to the Proposed Project component sites, and connects with regional highways SR 218 in Seaside and SR 68 in Monterey. The most recent data published by Caltrans indicate the average daily traffic volume on Highway 1 ranges from 41,000 to 45,000 vehicles between Highway 156 and Marina and from 54,000 to 82,000 vehicles between Marina and the Monterey southern city limits (California Department of Transportation, 2013).

**State Route 68** (Highway 68 or Monterey-Salinas Highway) is a major roadway connector link between Highway 183 and Highway 101 in Salinas and Highway 1 in Monterey. Highway 68 is primarily a two-lane road between Monterey and Reservation Road. Highway 68 is a limited access four-lane freeway between Toro Park and Spreckels Boulevard, which becomes a conventional four-lane highway configuration between Spreckels Road and Blanco Road. The Highway 68/Highway 218 intersection is signalized as are several other intersections between Highway 218 and Monterey. The most recent data published by Caltrans indicate the average daily traffic volume on Highway 68 ranges from 21,800 to 29,000 vehicles between the interchanges with Highway 1 in Monterey and with Reservation Road (California Department of Transportation, 2013).

**State Route 156** (Highway 156) is a two-lane highway, serving as an east-west connector from Highway 101 to Highway 1. Highway 156 becomes a four-lane highway for less than 2 miles along the southern edge of Castroville, where it connects to Highway 1. As a connector, it experiences high weekend peak traffic volumes, carrying a significant number of visitors, mostly from the San Francisco Bay Area and Central Valley, to the Monterey Peninsula. The most recent data published by Caltrans indicate the average daily traffic volume on Highway 156 ranges from 28,000 to 31,000 vehicles between Highway 1 and Highway 101 (California Department of Transportation, 2013).

**State Route 183** (Highway 183) is routed along West Market Street in the City of Salinas, which is a four-lane facility between Main Street and the Salinas city limits, and a two lane conventional highway between the Salinas city limits and Highway 1 in Castroville. Highway 183 is ten miles in length, beginning at the junction of Highway 101 in Salinas and continuing westerly to the junction of Highway 1 in Castroville. Highway 183, known as Merritt Street through Castroville, serves as the main arterial through the community and also experiences high rates of agricultural truck traffic. The most recent data published by Caltrans indicate the average daily traffic volume on Highway 183 ranges from 12,000 to 38,000 vehicles between Highway 1 and Highway 101 (California Department of Transportation, 2013).

### Local Roadways

The project area has a network of roads that serve various purposes. Arterial streets are designed to carry the traffic of local and collector streets to and from freeways and other major streets, generally providing direct access to nonresidential properties. Collector streets are designed to move traffic between arterials to local roadways. Local roads generally provide direct access to residential land uses. The roadways that would be most affected by project construction activities (and, to a lesser extent, project operations) are primarily two-lane roads, although some potentially affected roadways have four travel lanes (two in each direction). Characteristics for the local roadways (e.g., number of travel lanes, bike lanes, parking availability, public transit service, etc.) for the roads in the Proposed Project area are shown in **Table 4.17-1, Characteristics of Roadways in the Vicinity of the Proposed Project, By Component**.

### Truck Routes

The State has designated major routes and connecting routes for truck use. The designated routes in Monterey County are shown below (California Department of Transportation, 2014).

- U.S. Highway 101
- State Route 68 (Monterey-Salinas Highway)
- State Route 1
- State Route 156
- State Route 183
- State Route 218 (Canyon Del Rey Road)

**Table 4.17-1**  
**Characteristics of Roadways in the Vicinity of the Proposed Project, By Component**

Roadway/Segment	Lanes	Traffic Volumes <sup>1</sup>	Bike Lanes	On-Street Parking	Public Transit Lines <sup>2</sup>	Jurisdiction (Figure Reference)
Source Water Diversion and Storage Sites						
Salinas Pump Station and Salinas Industrial Wastewater Treatment Facility and Pipeline						
Hitchcock Road	2	NA	No	No	No	City of Salinas (Fig. 4.17-2)
South Davis Road	2	NA	No	No	No	
Davis Road, South of Blanco Road	2	8,053	No	No	No	
Reclamation Ditch Diversion						
Davis Road	2	NA	Yes	No	MST 56	Unincorporated Monterey County and City of Salinas (Fig. 4.17-3)
Market Road	4	NA	No	No	MST 28	
Tembladero Slough Diversion						
Highway 1 south of 183; Highway 1 north of 183	2	17,700; 31,000	Yes	No	MST 78	Unincorporated Monterey County (Fig. 4.17-3)
Watsonville Road	1	NA	No	No	No	
Blanco Drain Diversion						
Nashua Road, Cooper Road, Blanco Road	2	NA	No	No	No	Unincorporated Monterey County (Fig. 4.17-3)
Lake El Estero Diversion						
Del Monte Boulevard: Camino Aguajito to Camino El Estero	4	37,785 to 39,105	No	Yes	MST (multiple routes) MST 19 & 20	City of Monterey (Fig. 4.17-6)
Treatment Facilities at the RTP (AWT Facility and SVRP Modifications)						
Charles Benson Road: Del Monte Boulevard to MRWPCA Regional Treatment Plant facility	2	NA	No	No	No	Unincorporated Monterey County (Fig. 4.17-4)
Product Water Conveyance System						
RUWAP Alignment: AWT Facility to Booster Pump Station						
Crescent Avenue	2	NA	No	Yes	MST 27, 71	City of Marina (Fig. 4.17-4)
Carmel Avenue	2	NA	No	Yes	MST 27, 71	
Vaughn Avenue	2	NA	No	Yes	No	
Reindollar Road: Del Monte Ave and Sunset Ave	2	7,025	No	Yes	MST 71	

Table 4.17-1

## Characteristics of Roadways in the Vicinity of the Proposed Project, By Component

Roadway/Segment	Lanes	Traffic Volumes <sup>1</sup>	Bike Lanes	On-Street Parking	Public Transit Lines <sup>2</sup>	Jurisdiction (Figure Reference)
California Avenue: Imjin Pkwy and Reindollar Rd	2	4,536	Yes	No	No	
5 <sup>th</sup> Avenue	2	NA	No	No	No	
RUWAP Alignment: Booster Pump Station to Injection Well site						
Inter-garrison Road	2	NA	No	No	MST 17, 74	Cities of Marina and Seaside (See Figure 4.17-5)
5 <sup>th</sup> Avenue	2	NA	No	No	No	
Engineer Lane	2	NA	No	No	No	
General Jim Moore Boulevard: Lightfighter Drive to Gigling Road	4	8,696	Yes	No	MST 16	
General Jim Moore Boulevard: Gigling Road to Arloncourt Road	4 lanes (median)	NA	Yes	No	MST 12, 75	
General Jim Moore Boulevard: Coe Avenue to McClure Road	4 lanes (median)	6,531	Yes	No	MST 12, 75	
General Jim Moore Boulevard: Coe Avenue to Broadway Avenue	4 lanes (median)	6,587	Yes	No	MST 6,12, 77	
Eucalyptus Road (currently closed)	4	none	Yes	No	No	
Coastal Alignment: Treatment Facilities to Booster Pump Station						
Del Monte Boulevard: Lapis Road to Beach Road	2	2,990 to 3,375	Rec. Trail	Yes	MST 27	Unincorporated Monterey County and City of Marina (Fig. 4.17-4)
Del Monte Boulevard: Beach Road to Reservation Road	4 lanes (median)	NA	Rec. Trail	No	MST 27	City of Marina (Fig. 4.17-4 and 4.17-5)
Del Monte Boulevard: Reservation Road to Highway 1 interchange	4 lanes (median)	24,850 to 26,700	Rec. Trail	No	MST 17, 19, 20, 78	
Divarty Street: Highway 1 to 2 <sup>nd</sup> Ave	2	NA	No	No	No	City of Seaside (Fig. 4.17-5)
Divarty Street: 1st Avenue to 2nd Avenue	2	NA	No	No	No	City of Seaside (Fig. 4.17-5)
Coastal Alignment: Booster Pump Station to Injection Well site						
2 <sup>nd</sup> Avenue: Divarty Street to Lightfighter Drive	4 lanes (median)	NA	Class I Bike Trail	No	No	City of Seaside (Fig 4.17-5)
Lightfighter Drive: 2 <sup>nd</sup> Avenue to General Jim Moore Boulevard	4 lanes (median)	NA		No	No	
General Jim Moore Boulevard: Lightfighter Drive to Gigling Road	4	8,696		No	MST 16	
General Jim Moore Boulevard: Gigling Road to Arloncourt Road	4 (median)	NA	Yes	No	MST 12, 75	
General Jim Moore Boulevard: Coe Avenue to McClure Road	4 lanes (median)	6,531	Yes	No	MST 12, 75	
General Jim Moore Boulevard:	4 lanes	6,587	Yes	No	MST 6,12, 77	

Table 4.17-1

## Characteristics of Roadways in the Vicinity of the Proposed Project, By Component

Roadway/Segment	Lanes	Traffic Volumes <sup>1</sup>	Bike Lanes	On-Street Parking	Public Transit Lines <sup>2</sup>	Jurisdiction (Figure Reference)
Coe Avenue to Broadway Avenue	(median)					
Eucalyptus Road (currently closed)	4 lanes	none	Yes	No	No	
Injection Well Facilities						
General Jim Moore Boulevard: McClure Road to Coe Avenue	4 lanes (median)	6,531	Yes	No	MST 12, 75	City of Seaside (Fig 4.17-5)
General Jim Moore Boulevard: Coe Avenue to Broadway Avenue	4 lanes (median)	6,587	Yes	No	MST 6,12, 77	
Eucalyptus Road (currently closed)	4 lanes	none	Yes	No	No	
CalAm Distribution System Pipeline						
Transfer Pipeline						
Auto Center Parkway (La Salle Avenue): Del Monte Boulevard to Fremont Boulevard	4 lanes	NA	No	No	MST Jazz A	City of Seaside (Fig 4.17-5)
La Salle Avenue: Fremont Boulevard to Flores Avenue	2 lanes	NA	No	Yes	MST Jazz A	
Flores Avenue to Yosemite Street					NA	
Yosemite Street: La Salle Ave to Hilby Avenue	2 lanes	NA	No	Yes	MST 8, 11 Jazz B	
Hilby Avenue: Yosemite Street to Mescal Street	2 lanes	NA	No	Yes	No	
General Jim Moore Boulevard: North and south of Hilby Avenue	4 lanes (median)	5,900 to 6,955	No	Yes	No	
Monterey Pipeline						
Del Monte Avenue: La Salle Avenue to Camino El Estero	4 lanes	37,785 to 39,150	No	No	MST (multiple routes)	Seaside and Monterey (Fig 4.17-6)
Camino El Estero to Washington Street	6 lanes	NA	No	No	MST 19, 20	Monterey (Fig 4.17-6)
Figueroa Street: Del Monte Avenue to Franklin Street	2 lanes	NA	Yes	Yes	No	
Franklin Street: Figueroa Street to Pacific Street	2 lanes (one-way)	9,880 to 10,850	No	Yes	MST (multiple routes) <sup>3</sup>	
Pacific Street to High Street	2 lanes	8,085 to 8,640	No	Yes	MST (multiple routes) <sup>3</sup>	
High Street: Franklin Street to the Presidio of Monterey	2 lanes	NA	No	Yes	No	

<sup>1</sup>Average daily traffic volumes provided by the Transportation Agency for Monterey County (TAMC, 2012).  
<sup>2</sup>Public transit information provided by Monterey-Salinas Transit (MST, 2014).  
<sup>3</sup> MST routes along this segment of Franklin Street include Routes 3, 19, 20, 55, 70, 71, 72, 74, 75, 76, and 77.  
NA = Not Available

Some jurisdictions within Monterey County have adopted designated truck routes to reduce problems associated with increased congestion during peak hours and to direct trucks away from certain streets that were not designed to accommodate the excess weight. Some types of modern trucks accommodate a larger and heavier cargo load and require special geometric designs for roads. Locally-designated truck routes in the vicinity of Proposed Project components include:

- **City of Monterey** - Aguajito Road (City of Monterey-Fremont Street to Mark Thomas Drive/Highway 1); Del Monte Avenue (City of Monterey – Pacific Street to East City Limit); Figueroa Street (City of Monterey – Franklin Street to Commercial Wharf H)
- **City of Marina** –The City of Marina General Plan prohibits commercial trucks on local residential streets and local residential collectors except for purposes of local deliveries.

### Traffic Operating Conditions on Roadways

Traffic conditions are measured by average daily traffic (ADT), peak hour traffic volumes, level of service (LOS), average delay, and volume to capacity (V/C) ratio. Average daily traffic is the total number of cars passing over a segment of the roadway, in both directions, on an average day. Peak hour volumes are the total number of cars passing over a roadway segment during the peak hour in the morning (AM) or afternoon/evening (PM).

Level of Service (LOS) is used to identify the magnitude of traffic congestion and delay at intersections and along highways and roadways in some jurisdictions. The LOS is based on several factors, including traffic volumes, number of lanes, type of intersection control, speed and travel time, traffic interruptions, driving comfort and convenience, and is expressed qualitatively on a six-level range of conditions, represented as LOS A (best) to LOS F (worst). LOS A through D generally represent traffic volumes that are lower than the roadway capacity, while LOS E represents volumes that are at capacity conditions and LOS F represents over capacity or forced flow conditions. See **Table 4.17-2, Level of Service (LOS) Definitions** for LOS definitions.

**Table 4.17-2**  
**Level of Service (LOS) Definitions**

Level of Service	Description
A	Free-flow with no delays. Users are virtually unaffected by others in the traffic stream.
B	Stable traffic. Traffic flows smoothly with few delays.
C	Stable flow but the operation of individual users becomes affected by other vehicles. Modest delays.
D	Approaching unstable flow or operation. Operation of individual users becomes significantly affected by other vehicles. Delays may be longer than one cycle during peak hours. .
E	Unstable flow with operating conditions at or near the capacity level. Long delays and vehicle queuing.
F	Forced or breakdown flow that causes reduced capacity. Stop and go traffic conditions. Excessive long delays and vehicle queuing

Source: Transportation Research Board, Highway Capacity Manual 2010, National Research Council

The LOS standard of measurement typically is used when evaluating effects of traffic increases on intersection and roadway operations due to new development, but generally does not apply to construction projects which do not result in permanent traffic increases. Other measures of roadway operating conditions and/or performance may include the amount of vehicle delay and vehicle miles traveled, as well as consideration of all transportation modes in addition to automobiles.

Caltrans, which has jurisdiction over state highways, endeavors to maintain a target LOS at the transition between LOS C and D for its facilities, according to the Caltrans *Guide for Preparation of Traffic Impact Studies* (California Department of Transportation, 2002). Additionally, if an existing State highway facility is operating at less than the target LOS, the Caltrans Guide states that the existing LOS should be maintained (California Department of Transportation, 2002).

Most local jurisdictions have developed LOS standards or goals as part of their General Plans. LOS goals and standards for the jurisdictions in which the Proposed Project components are located are summarized below:

Monterey County. Per the County's 2010 General Plan, the acceptable level of service for County roads and intersections is LOS D except in specified situations.

City of Marina. Per the City's General Plan (2006), a peak period LOS D shall be maintained for all highway segments and major roads within the Marina Planning Area, except that where existing roads and highways are operating at a lower LOS standard at the time of plan adoption, the existing LOS will be maintained or improved.

City of Monterey. Per the City's General Plan (2005 as updated through 2013), the Circulation Element replaces traditional auto-oriented LOS standards with multi-modal LOS goals that promote transit, bicycle, and pedestrian-oriented development in areas best served by these alternative modes of transportation. The General Plan seeks to establish multi-modal LOS standards and automobile LOS standard for defined neighborhoods that together measure the effectiveness of the transportation system. The General Plan also establishes LOS D as an acceptable automobile LOS standard for roadway segments that are not within a multi-modal corridor and LOS E and LOS F as an acceptable automobile LOS on roadway segments within a completed multi-modal corridor as defined in the Multi-Modal Mobility Plan (MMMP).

City of Pacific Grove. Per the City's 1994 General Plan, the City strives to maintain a LOS no worse than C during peak periods on arterials and collector streets within the city, and to accept LOS D during weekday peak-periods at intersections that were close to LOS D on arterial routes outside the Downtown area.

City of Salinas. Per the City's 2002 General Plan, the City strives to maintain a LOS D or better for all intersections and roads.

City of Seaside. Per the City's General Plan (2004), Seaside has established LOS C as the level of service standard for signalized and unsignalized intersections.

#### **4.17.2.2 Bicycle and Pedestrian Network**

Monterey County has approximately 246 miles of maintained bikeways on state, county and local roads. There are also several designated bikeways throughout the project area that serve as both recreational facilities and alternative transportation routes. "Bikeway" is a general term used to refer to facilities that primarily provide for efficient and safe bicycle travel. Bikeways in the county are classified as Class I, II, and III. These classifications generally follow design standards established by Caltrans:



Class I (bike path) - a completely separate right-of-way designed for the exclusive use of cyclists and pedestrians.

Class II (bike lane) - a lane on a roadway that is separated from motorists by paint striping; designated for the exclusive use or semi-exclusive use of bicycles.

Class III (bike route) - allows for shared use of the roadway with motorists; designated by signs or permanent marking.

The 18-mile-long, Class I, Monterey Peninsula Recreational Trail extends from Lovers Point in Pacific Grove to Del Monte Boulevard, north of Marina. In addition to the Monterey Peninsula Recreational Trail, numerous other designated bike routes occur along roadways within the county, some of which support a designated bike lane. Class I bikeways exist along General Jim Moore Boulevard between Normandy Road and Coe Avenue. A Class II bikeway exists along General Jim Moore Boulevard between Coe Avenue and Canyon del Rey Boulevard. **Figures 4.17-2 through 4.17-6** show Class I bike paths in the vicinity of the Proposed Project component sites.

**Table 4.17-1, Characteristics of Roadways in the Vicinity of the Proposed Project**, identifies bicycle routes located on roadways adjacent to the Proposed Project component sites. The level of pedestrian facilities and pedestrian volumes varies in the Proposed Project area, but the predominant travel mode in the area is by automobile.

### 4.17.2.3 Public Transit Service

#### Buses

Public transit services are provided by Monterey-Salinas Transit (MST) and Greyhound Lines. Monterey-Salinas Transit is a public transportation agency that provides bus service to the greater Monterey and Salinas areas, plus routes to Carmel Valley and North County. Greyhound provides intercity passenger service between Monterey Peninsula cities, Salinas, Salinas Valley cities, as well as intra- and inter-state service (Monterey County, 2010).

MST routes that operate in the vicinity of the Proposed Project area include Routes 12, 16, 17, 20, 21, 26, 27, 55, 56, 77, 91, 28, and 38 (Monterey-Salinas Transit, 2013). **Table 4.17-1**, above, indicates the Proposed Project area roadways that are shared with public transit routes.

#### Railroads

Amtrak provides passenger rail service in Monterey County, with the Coast Starlight (daily departures in each direction between Seattle and Los Angeles) serving Salinas with a daily northbound and southbound train. The Union Pacific Railroad (UPRR) provides freight service in Monterey County.

TAMC owns a 13-mile segment of railroad right-of-way between Castroville (where it connects with the Union Pacific Railroad) and Monterey (where it terminates at Cannery Row). TAMC is considering the option of building a light rail or express bus system along this segment. Known as the Monterey Branch Line, the right-of way passes through the cities of Marina and Seaside, and Fort Ord. Several portions of the right-of-way have been paved over within Seaside and Monterey to accommodate recreational trails.

#### Airports

The Monterey Regional Airport and Marina Municipal Airport serve the Monterey region. The Monterey Regional Airport comprises an area of 498 acres and has been in service since 1941.

It is classified as a “non-hub” airport that is served by five airlines (Monterey Regional Airport, 2013). The Comprehensive Land Use Plan for Monterey Regional Airport was approved by the Monterey County Airport Land Use Commission in 1987. The plan adopts the land use designations of the general plans of the jurisdictions within the Airport’s “Area of Influence,” and includes the cities of Monterey, Del Rey Oaks, Seaside, Sand City, Pacific Grove, and portions of the County of Monterey. In addition, the plan shows the specific Approach Protection Zone and a Runway Protection Zone, neither of which is in the Proposed Project area.

The Marina Municipal Airport Comprehensive Land Use Plan was adopted in 1996 and is designed to ensure that surrounding land use development is compatible and does not cause a hazard to aircraft in flight. In addition, the plan includes a map of the Approach and Runway Protection Zones, which aim to restrict development to low density land uses.

See **Section 4.9, Hazards and Hazardous Materials**, for further discussion of airport safety issues.

### **4.17.3 Regulatory Framework**

#### **4.17.3.1 Federal and State**

**United States Department of Transportation Federal Highway Administration** (FHWA) supports state and local governments in the design, construction, and maintenance of the nation’s highway system. Federal interstate highway standards are implemented in California by Caltrans.

**California Department of Transportation** (Caltrans) is responsible for constructing, enhancing, and maintaining the state highway and interstate freeway systems. As a result, any change to the state roadway system requires an encroachment permit from Caltrans. Work that requires movement of oversized or excessive load vehicles on highway facilities requires a transportation permit by Caltrans.

In addition to maintaining highways and general regulations and laws dealing with licensing, traffic signage, and other noncommercial driver requirements, state laws and regulations also govern motor carriers on roadways within the state.

#### **4.17.3.2 Regional and Local**

##### **Transportation Agency for Monterey County**

The Transportation Agency of Monterey County is an independent association of local officials who oversee planning and funding of regional transportation improvements throughout Monterey County. The agency prepares the Regional Transportation Plan and oversees the implementation of its recommended improvements.

##### **Association of Monterey Bay Area Governments**

The Association of Monterey Bay Area Governments (AMBAG) prepares studies, plans, and policy and action recommendations that may be incorporated into regulatory documents. In addition to its transportation planning and study functions and policy recommendations, AMBAG develops and maintains a regional travel demand forecasting model used for the planning of regional transportation facilities and the assessment of development proposals.

## Local General Plans

General Plans have been adopted by Monterey County for unincorporated areas and by the incorporated cities of Monterey, Marina, Pacific Grove, Salinas, and Seaside, which each have their own plans, policies and/or capital improvement programs that regulate transportation improvements. The cities and county public works departments administer encroachment permits for work performed within their rights-of-way.

## Plans and Policies Consistency Analysis

**Table 4.17-3, Applicable State, Regional and Local Land Use Plans and Policies Relevant to Traffic and Transportation** describes the state, regional, and local land use plans, policies, and regulations pertaining to traffic and transportation that are relevant to the Proposed Project and that were adopted for the purpose of avoiding or mitigating an environmental effect. Also included in **Table 4.17-3** is an analysis of project consistency with these plans, policies, and regulations. In some cases, policies contain requirements that are included within enforceable regulations of the relevant jurisdiction. Where the analysis concludes the project would not conflict with the applicable plan, policy, or regulations, the finding and rationale are provided. Where the analysis concludes the project may conflict with the applicable plan, policy, or regulation, the reader is referred to **Section 4.17.4, Impacts and Mitigation Measures**, for additional discussion, including the relevant impact determination and mitigation measures.

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Table 4.17-3  
Applicable State, Regional, and Local Land Use Plans and Policies Relevant to Traffic and Transportation

Project Planning Region	Applicable Plan	Plan Element/ Section	Project Component	Specific, Policy or Program	Project Consistency with Policies and Programs
Monterey County	Monterey County General Plan	Circulation	Salinas Treatment Facility and Pipeline Reclamation Ditch Diversion Tembladero Slough Diversion Blanco Drain Diversion Treatment Facilities at Regional Treatment Plant Product Water Conveyance: RUWAP and Coastal Alignment Options	<b>Policy C-4.3:</b> The needs of bicyclists and pedestrians, as well as provisions for utilities and drainage, shall be considered and, where appropriate, provided in all public rights-of-way in a manner that minimizes impacts to adjacent land uses.	<b>Consistent, with mitigation:</b> Project construction would temporarily increase traffic safety hazards for bicyclists and pedestrians, and could impede access to and along recreational trails. The Proposed Project would not result in changes to or permanent disruption of public access in public rights-of-way. This policy provides direction when considering right-of-way improvements. These issues are addressed further in Impact TR-2, which identifies a mitigation measure that would minimize or avoid this potential inconsistency.
City of Marina (coastal zone)	City of Marina Local Coastal Program Land Use Plan	Policies	Product Water Conveyance: Coastal Alignment Option	<b>Policy 1:</b> To insure access to and along the beach, consistent with the recreational needs and environmental sensitivity of Marina Coastal area.	<b>Consistent, with mitigation:</b> Temporary impacts to beach access during construction would be less-than-significant. The Proposed Project would not permanently interfere with public access. Construction of the Coastal alignment of the Product Water Conveyance pipeline may temporarily disrupt transportation access to Fort Ord Dunes State Park. This issue is addressed further in Impact TR-2, which identifies a mitigation measure that would minimize or avoid this potential inconsistency.
City of Seaside (coastal zone)	City of Seaside Local Coastal Program Land Use Plan	Coastal Zone	Product Water Conveyance: Coastal Alignment Option Monterey Pipeline	<b>Policy PAR-CZ 1.1.B:</b> Maximize and protect public access including pedestrian and bicycle connectivity and recreational opportunities in the coastal zone consistent with resource conservation principles, public safety, public rights, and the rights of private property owners.	<b>Consistent:</b> The Proposed Project would not permanently affect public access or recreational opportunities in the coastal zone.
Seaside	Seaside General Plan	Circulation	Product Water Conveyance: RUWAP and Coastal Pipeline options and Coastal Booster Pump Station Injection Well Facilities Transfer Pipeline Monterey Pipeline	<b>Policy C-1.7:</b> Reduce impacts on residential neighborhoods from truck traffic and related noise.	<b>Consistent, with mitigation:</b> The Proposed Project is a water infrastructure project and therefore would not have any long term traffic impacts to residential neighborhoods. Short-term construction truck traffic would occur in residential neighborhoods in Seaside (see Table 4.17-1), but with implementation of Mitigation TR-2 would not cause a significant impact.
City of Monterey	Monterey Harbor Land Use Plan	Development	Monterey Pipeline	<b>Section 30253:</b> Minimization of adverse impacts. New development shall do all of the following: d. Minimize energy consumption and vehicle miles traveled.	<b>Consistent:</b> Proposed Project operations would result in a negligible increase in traffic and vehicle miles traveled.
City of Monterey	Monterey Harbor Land Use Plan	Public Access	Monterey Pipeline	<b>Section 30210:</b> Access; recreational opportunities; posting. In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.	<b>Consistent, with mitigation:</b> Construction of the Monterey Pipeline would temporarily impede access to recreational resources within the coastal zone. This issue is addressed further in Impact TR-2, and Mitigation TR-2 would minimize or avoid temporary disruption to coastal access.
City of Monterey	Monterey Harbor Land Use Plan	Public Access	Monterey Pipeline	<b>Section 30211:</b> Development not to interfere with access. Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.	<b>Consistent, with mitigation:</b> Construction of the Monterey Pipeline may temporarily impede access to shoreline access points within the coastal zone. This issue is addressed further in Impact TR-2, and Mitigation TR-2 would minimize or avoid temporary disruption to coastal access.
City of Monterey	Del Monte Beach Land Use Plan	Public Works	Monterey Pipeline	<b>Policy 13:</b> New development shall not preclude or interfere with planned public transportation improvements or facilities, e.g. restored rail service and associated shuttle service.	<b>Consistent, with mitigation:</b> Construction of the Monterey Pipeline may temporarily disrupt public transportation service along Del Monte Avenue. This issue is addressed further in Impact TR-2, and Mitigation TR-2 would minimize or avoid temporary disruption to public transportation access.
City of Monterey	Del Monte Beach Land Use Plan	Public Works, Parking, and Circulation	Monterey Pipeline	<b>Policy 3.K:</b> New development shall not preclude or interfere with planned public transportation improvements or facilities, e.g. restored rail service and associated shuttle service.	<b>Consistent, with mitigation:</b> Construction of the Monterey Pipeline may temporarily disrupt public transportation service along Del Monte Avenue. This issue is addressed further in Impact TR-2, and Mitigation TR-2 would minimize or avoid temporary disruption to public transportation access.

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## 4.17.4 Impacts and Mitigation Measures

### 4.17.4.1 Significance Criteria

Based on Appendix G of the CEQA Guidelines, a project would have a significant transportation impact if it would:

- a. 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.
- b. 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.
- c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, which results in substantial safety risks.
- d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- e. Result in inadequate emergency access.
- f. 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 additional significance criteria are needed to comply with the CEQA-Plus<sup>1</sup> considerations required by the State Revolving Fund Loan Program administered by the State Water Resources Control Board.

### 4.17.4.2 Impact Analysis Overview

#### Approach to Impact Analyses

The impact analyses in this section evaluate the potential for short-term construction-related traffic impacts that may result in increased traffic delays or hazards, or that may impede pedestrian, bicycle and transit access, including access to recreational resources. Long-term traffic impacts associated with Proposed Project operations are also addressed.

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<sup>1</sup> To comply with applicable federal statutes and authorities, EPA established specific “CEQA-Plus” requirements in the Operating Agreement with SWRCB for administering the State Revolving Fund (SRF) Loan Program.

Construction-related trip and traffic assumptions have been developed for each Proposed Project component, and are summarized on **Table 4.17-4, Construction Traffic Assumptions for all Proposed Project Components**. Final construction scheduling of specific facilities would result in simultaneous (concurrent) construction for more than one Proposed Project component; the analysis of potential impacts assumes that all Proposed Project components would be constructed during an approximately 18-21 month construction period. Following is a summary of assumptions used for the analysis in this section.

### *Construction Assumptions*

#### **Construction Duration and Schedule**

- Construction is anticipated to begin in June 2016 and would be substantially completed by December 2017 for a total construction period of 18 months, plus a 3-month testing period. General work hours are assumed to be between 7:00 AM and 8:00 PM, Monday through Saturday. Two work shifts (Shift 1: 7:00 AM-3:00 PM; Shift 2: 12:00 PM-8:00 PM) are planned at the following project sites: Salinas Pump Station Diversion, Salinas Treatment Facility, Lake El Estero Diversion, and the Product Water Pipeline and Booster Station. One work shift ending at 6:00 PM is planned at the Reclamation Ditch, Tembladero Slough and Blanco Drain Diversion sites and at the Salinas Valley Reclamation Plant improvements. Construction at the Regional Treatment Facilities and Injection Well Facilities would occur 24 hours per day and 7 days a week with up to 4 daily work shifts. There is a potential for nighttime construction at the Blanco Drain site.
- Product Water Conveyance Pipeline construction would be performed at an anticipated installation rate of 250 feet per day within roadway rights-of-way and at a rate of up to 400 feet per day in open (undeveloped) areas.
- CalAm Distribution System pipeline construction would be performed at the anticipated installation rate of 150 to 250 feet per day.
- Upon the completion of construction activities, roadways disturbed during pipeline installation would be restored to their preconstruction condition.

#### **Construction Trips Assumptions**

- Traffic-generating construction activities for all Proposed Project components is assumed to consist of the daily arrival and departure of construction work crews; trucks hauling equipment and materials to the work sites; hauling of excavated spoils from the site; and importing fill to the site.
- Workers would commute to and from the construction areas earlier or later than project-related construction truck trips.
- All workers are assumed to drive separately in single occupancy vehicles for the purpose of the traffic analysis.
- The average capacity for haul trucks would be 10 cubic yards per truck.
- The truck (haul) trip counts include the number of trucks that would come to the site and leave the site: one incoming trip and one outgoing trip. The worst-case daily assumption would be that all trucks are heavy duty (semi-trucks). The purpose of the trips would be to deliver construction equipment, vehicles, materials, and new treatment plant facilities and to remove construction materials, soils, and waste.



### Construction Staging Areas and Construction Techniques

- Staging areas would be set up along the pipeline alignments, and construction equipment and other materials would be located at selected locations to facilitate the movement of materials, equipment, and construction crews. Staging areas would be selected to minimize hauling distances, and would be located within the areas shown in **Chapter 2, Figures 2-18, 2-21 through 2-27, 2-30, 2-31, 2-38, and 2-39.**
- Construction equipment and materials associated with pipeline installation would be stored along the pipeline easements and at nearby designated staging areas. To the extent feasible, parking for construction and worker vehicles would be accommodated within the construction work areas and on adjacent roadways.
- Construction of non-linear facilities (facilities at the Source Water Diversion and Storage component sites, Treatment Facilities at the Regional Treatment Plant, Booster Pump Station, and Injection Well Facilities) could include site preparation, grading and excavation, equipment and materials deliveries, concrete formwork, building construction (only at the Regional Treatment Plant, Booster Pump Station, and Injection Well Facilities sites) installation of support equipment, installation of security fencing, and revegetation. Earthmoving activities would be performed using heavy construction equipment such as bulldozers, backhoes, cranes, and graders.
- Most linear facilities (conveyance pipelines) would be installed using conventional open-trench construction techniques. However, trenchless technologies such as boring and jacking, microtunneling, or horizontal directional drilling may be used where open-cut trenching is not feasible or desirable (highway crossings, stream and drainage crossings, and areas with high utility congestion).

### Construction Traffic and Roadway Controls

- All construction activities within roadways would be restricted to the right-of-way (ROW) approved by the applicable agency for public ROWs and property owner for private roads. All roadways disturbed during pipeline installation would be restored. Generally, trench spoils would be temporarily stockpiled within the construction easement, then backfilled into the trench after pipeline installation.

## *Operational Assumptions*

### Permanent Employees and Hours of Operation

- Upon completion of construction, all Proposed Project components would be in operation 24 hours a day with some exceptions. **Table 2-9** in the Project Description section of this EIR provides an overview of project facility operations.
- A total of up to nine new employees would be hired for operation and maintenance of all Proposed Project components. Five new employees are anticipated at the AWT Facility. The other four employees would be spread out among the other Proposed Project facilities.
- A total of eight heavy duty truck trips per weekday (i.e., four trucks) would be needed for the operation of the facilities.

## Areas of No Project Impact

Some of the significance criteria outlined above (b, c, d, f) are not applicable to the Proposed Project or the Proposed Project would not result in impacts related to these criteria, as explained below. Impact analyses related to criteria “a” and “e” are addressed below under **Subsections 4.17.4.4 (Construction Impacts)** and **4.17.4.5 (Operational Impacts)**.

*(b) Conflicts with Congestion Management Programs.* There are no adopted congestion management plans within any of the cities or unincorporated areas, and none have been adopted by the Monterey Agency for Monterey County. Thus, significance criterion “b” is not applicable.

*(c) Air Traffic Patterns.* The project would not affect air traffic patterns of the airports (criterion “c”) that are located within two miles of the Proposed Project components (Monterey Regional and Marina Municipal Airports). Construction would not occur in proximity to either airport nor would construction equipment exceed height restrictions within these areas. Permanent, above-ground structures that would be constructed at the Regional Treatment Plant would not be within a designated protected area of either airport. Therefore, the Proposed Project would not alter air traffic patterns nor result in substantial safety risks associated with airport operations. The Injection Well Facilities site is located approximately two miles from the Monterey Regional Airport; however, it is not situated within Approach Protection Zone or a Runway Protection Zone and therefore project construction and operations would not interfere with Airport operations, nor is this site subject to any aviation-related development limitations (Monterey Regional Airport Land Use Plan, 1987).

*(d) Increased Hazards Due to Design.* Significance criterion “d” does not apply to either the Proposed Project’s design or temporary construction impacts. The Proposed Project would not include new road designs or alterations of existing features (e.g., road realignment) that could substantially increase hazards. In addition, traffic generated by the Proposed Project would be compatible with the mix of vehicle types (autos and trucks) currently using nearby Proposed Project-area roads. Therefore, the Proposed Project would not result in hazards caused by a design feature or use that is incompatible with roadway designs. Temporary impacts related to roadway safety during project construction are addressed in Impact TR-2 (construction-related traffic delays, safety hazards and access limitations).

*(e) Conflict with Adopted Policies Regarding Transit, Bicycle or Pedestrian Facilities.* The intent of significance criterion “e” is to account for potential project conflicts with adopted policies, plans, and programs regarding public transit, bicycle or pedestrian facilities or otherwise decrease the performance or safety of such facilities. The Proposed Project does not include changes in policies or programs that support alternative transportation, and Proposed Project operation would not conflict with adopted policies, plans, or programs supporting alternative transportation. The Proposed Project would not directly or indirectly eliminate, alter or conflict with alternative transportation corridors or facilities (e.g., bike paths, lanes, bus turnouts, etc.). Temporary impacts related to alternative modes of transportation and access during project construction are addressed in Impact TR-2 (construction-related traffic delays, safety hazards and access limitations).

**Table 4.17-4**  
**Construction Traffic Assumptions for all Proposed Project Components**

Proposed Project Component		Potential Access Routes and Access to Component Site for Construction Vehicles <sup>2</sup>	Length of Construction (months)	Trucks Per Day		Workers Per Day		Worker Shifts (assumes compressed construction schedule for worst case daily trips)
				avg.	worst-case	avg.	worst-case	
Source Water and Storage Diversion Sites	Salinas Pump Station	<ul style="list-style-type: none"> <li>North SR1 to Imjin Pkwy to Reservation Rd to Blanco Rd to Davis Rd to Hitchcock Rd to Driveway</li> <li>South SR1 to Merritt St to SR 183 to Davis Rd to Hitchcock Rd to Driveway</li> <li>North 101 to Abbott St to E Blanco Rd to S Davis Rd to Hitchcock Rd to Driveway</li> <li>South 101 to Laurel Dr to N. Davis Rd to Hitchcock Rd to Driveway</li> <li>Highway 68 to Reservation Road to Davis Road to Hitchcock Rd to Driveway</li> </ul>	5	3	6	5	15	2 daytime shifts
	Salinas Industrial Wastewater Treatment Facility/Pipeline	<ul style="list-style-type: none"> <li>North SR1 to Imjin Pkwy to Reservation Rd to Davis Rd to Driveway</li> <li>South SR1 to Merritt St to SR 183 to Davis Rd to Driveway</li> <li>North 101 to Abbott St to E Blanco Rd to S Davis Rd to Driveway</li> <li>South 101 to Laurel Drive to N. Davis Rd to Driveway</li> <li>Highways 68 to Reservation Road to Davis Road to Driveway</li> </ul>	13	20	35	16	22	2 daytime shifts
	Reclamation Ditch	<ul style="list-style-type: none"> <li>North SR1 to Imjin Pkwy to Reservation Rd to Blanco Rd to Davis Rd to site access on Market St through industrial site</li> <li>South SR1 to SR 183 to site access on Market St through industrial site</li> <li>Hwy 101 to Laurel St to Davis Rd to site access on Market St through industrial site</li> </ul>	5	3	5	6	8	1 daytime shift
	Tembladero Slough	<ul style="list-style-type: none"> <li>North or South Hwy 101 to West 183 to North SR1 to Castroville Pump Station driveway</li> <li>North or South SR1 to Castroville Pump Station driveway</li> </ul>	5	3	5	6	8	2 daytime shifts
	Blanco Drain	<ul style="list-style-type: none"> <li>North of Salinas River (pump and pipeline): North or South SR1 to Nashua Road to private driveway</li> <li>North Hwy 101 to Abbott St to E Blanco Rd to Cooper Rd to private driveway</li> <li>South Hwy 101 to Laurel St to Davis Rd to Blanco Rd to Cooper Rd to private driveway</li> <li>South of Salinas River (pipeline only):</li> <li>See Regional Treatment Plant access, below</li> </ul>	9	20	28	8	12	2 daytime shifts
	Lake El Estero	<ul style="list-style-type: none"> <li>North SR1 to Aguajito Rd to Camino Aguajito to Pearl Street</li> <li>South SR1 to Camino Aguajito to Pearl Street</li> <li>North or South 101 to SR 68 to Fremont St to Camino Aguajito to Pearl Street</li> </ul>	3	2	5	3	7	2 daytime shifts

<sup>2</sup> Construction vehicle routes and access to the component site are based on the most direct route. Actual route may vary depending on the time of year, concurrent projects, and the contractor's construction management plan.

**Table 4.17-4**  
**Construction Traffic Assumptions for all Proposed Project Components**

Proposed Project Component		Potential Access Routes and Access to Component Site for Construction Vehicles <sup>2</sup>	Length of Construction (months)	Trucks Per Day		Workers Per Day		Worker Shifts (assumes compressed construction schedule for worst case daily trips)
				avg.	worst-case	avg.	worst-case	
<b>Treatment Facilities at Regional Treatment Plant (Advanced Water Treatment Facility and Salinas Valley Reclamation Plant Modifications)</b>		<ul style="list-style-type: none"> <li>North 101 to West 183 to west 156 to South SR1 to Del Monte Blvd to Charles Benson Rd. or</li> <li>North Hwy 101 to Abbott St to Blanco Rd to Reservation Rd to Del Monte Blvd to Charles Benson Rd</li> <li>South 101 to SR 156 to SR1 to Del Monte Blvd to East Charles Benson Rd</li> <li>North or South on SR1 to Del Monte Blvd to Charles Benson Rd</li> </ul>	18	5	20	10	30	24 hours/day, 7 days/week (up to four shifts)
<b>Product Water Conveyance Systems</b>	<b>RUWAP Alignment: Pipeline from AWT Facility to Booster Pump Station to Injection site</b>	See Table 4.17-1	15	3	5	12	12	2 daytime shifts
	<b>RUWAP Alignment: Booster Pump Station</b>	<ul style="list-style-type: none"> <li>North or South SR1 to Imjin Pkwy to California Ave/ 5th Ave (closed road)</li> <li>North or South SR1 to Lightfighter Drive to General Jim Moore Blvd to Inter-Garrison Rd to 5th Ave</li> <li>South 101 to Market St Exit to SR 183 to Davis Rd to Blanco Rd to Reservation Rd to Imjin Pkwy to 5th Ave</li> <li>North 101 to Abbott St to E Blanco Rd to Reservation Rd to Imjin Pkwy to 5th Ave</li> </ul>	9	3	3	5	16	2 daytime shifts
	<b>Coastal Alignment: Pipeline from AWT Facility to Booster Pump Station to Injection site</b>	See Table 4.17-1	15	4	6	12	12	2 daytime shifts
	<b>Coastal Alignment: Booster Pump Station</b>	<ul style="list-style-type: none"> <li>North or South SR1 to Lightfighter Dr to 2nd Ave</li> <li>North 101 to Abbott St to E Blanco Rd to Reservation Rd to Imjin Pkwy to 2nd Ave.</li> <li>South 101 to Laurel Dr to N Davis Rd to W Blanco Rd to Reservation Rd to Imjin Pkwy to 2nd Ave</li> </ul>	9	3	7	5	16	2 daytime shifts
<b>Injection Well Facilities</b>	<b>Injection Wells</b>	North or South 101 to SR 68 to SR 218 to General Jim Moore Blvd North or South SR1 to Lightfighter Dr to General Jim Moore Blvd	17	8	16	8	24	Southernmost injection well site would be restricted to daytime hours: 7 AM to 6 PM;
	<b>Back-flush Pipes/Basin</b>			1	13	6	10	

**Table 4.17-4**  
**Construction Traffic Assumptions for all Proposed Project Components**

Proposed Project Component		Potential Access Routes and Access to Component Site for Construction Vehicles <sup>2</sup>	Length of Construction (months)	Trucks Per Day		Workers Per Day		Worker Shifts (assumes compressed construction schedule for worst case daily trips)
				avg.	worst-case	avg.	worst-case	
	Electrical Control			1	10	7	11	24 hours/day, 7 days/week, as feasible (up- to 4 shifts)
	Pipelines			2	5	9	15	
CalAm Distribution Pipelines	Transfer	See Table 4.17-1	6	12	12	25	25	2 daytime shifts
	Monterey		12	12	12	25	25	2 daytime shifts

## Summary of Impacts

**Table 4.17-5, Summary of Impacts Traffic and Transportation** provides a summary of potential impacts related to traffic and transportation and significance determinations at each Proposed Project component site.

**Table 4.17-5**

**Summary of Impacts – Traffic and Transportation**

Impact Title	Source Water Diversion and Storage Sites						Treatment Facilities at Regional Treatment Plant	Product Water Conveyance		Injection Well Facilities	CalAm Distribution System		Project Overall
	Salinas Pump Station	Salinas Treatment Facility Storage and Recovery	Reclamation Ditch	Tembladero Slough	Blanco Drain (Pump Station and Pipeline)	Lake El Estero		RUWAP Alignment Option	Coastal Alignment Option		Transfer Pipeline	Monterey Pipeline	
TR-1: Construction Traffic	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS
TR-2: Construction Traffic Delays, Safety and Access Limitations	LS	LS	LS	LS	LS	NI	LS	LSM	LSM	NI	LSM	LSM	LSM
TR-3: Construction-Related Road Deterioration	LSM	LSM	LSM	LSM	LSM	LSM	LSM	LSM	LSM	LSM	LSM	LSM	LSM
TR-4: Construction Parking Interference	NI	NI	NI	NI	NI	LSM	NI	LSM	LSM	NI	LSM	LSM	LSM
TR-5: Operational Traffic	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS	LS
Cumulative Impacts	LS: There would be no significant construction-related cumulative traffic and transportation impacts. The Proposed Project would not make a considerable contribution to significant cumulative traffic and transportation impacts from cumulative development.												
NI – No Impact LS – Less-than-Significant LSM – Less-than-Significant with Mitigation SU – Significant Unavoidable BI – Beneficial Impact													

#### 4.17.4.3 Construction Impacts and Mitigation Measures

**Impact TR-1: Construction Traffic.** Proposed Project construction would result in a temporary increase in traffic volumes on regional and local roadways due to construction-related vehicle trips, which would not result in conflicts with any applicable plan, ordinance, or policy establishing measures of effectiveness for performance of the circulation system. (Criterion a) (Less-than-Significant)

Construction activities would result in a temporary increase in traffic on the regional roadway circulation system during the construction period. Traffic generated during construction activities would include the daily arrival and departure of construction work crews; trucks hauling equipment and materials to the work sites; hauling of excavated debris and spoils from the site; and importing of fill to the construction sites. The number of construction-related trips would vary among the different facilities. Construction of the Proposed Project would take place at the various project component locations in the project area. Multiple project components may be constructed simultaneously, and the construction traffic for some of the components could use the same roads.

Construction workers and construction vehicles would use regional highways and local roadways to access the construction work areas. **Table 4.17-4** identifies likely access routes and estimated construction duration for each Proposed Project component, and also presents the estimated number of daily workers and trucks at each project component construction site. The ultimate construction scheduling of the Proposed Project components would be determined when design plans are finalized; as such, the scheduling could vary from what is presented in **Table 4.17-4**. Likewise, the exact construction characteristics, such as excavation quantities or estimated truck trips, could also vary. However, the construction scenario characteristics summarized on **Table 4.17-4** have been developed to allow a reasonable assessment of the nature and magnitude of potential construction impacts.

**Table 4.17-6**, estimates the maximum daily construction trips for each Proposed Project component. Construction-related worker trips are expected to occur during the weekday morning peak traffic periods of 7:00 AM to 9:00 AM, but not during the weekday afternoon peak traffic periods given the anticipated work shifts. As indicated above, two work shifts (Shift 1: 7:00 AM-3:00 PM; Shift 2: 12:00 PM-8:00 PM) are planned at the following project sites: Salinas Pump Station Diversion, Salinas Treatment Facility, Lake El Estero Diversion, and the Product Water Pipeline and Booster Station. One work shift ending at 6:00 PM is planned at the Reclamation Ditch, Tembladero Slough and Blanco Drain Diversion sites and at the Salinas Valley Reclamation Plant improvements. For sites with two work shifts and 24-hour construction, the departure of first shift, as well as the arrival and departure of the second shift, would occur outside of the afternoon peak traffic period of generally 4:00 to 6:00 PM. The other sites that end at 6:00 PM also would be at the end of the weekday afternoon peak hour. Project-generated truck trips would be dispersed throughout the day (generally from 9:00 AM to 4:00 PM on weekdays), thus lessening the effect on peak-hour traffic.

**Table 4.17-6**  
**Estimated Maximum Daily Construction Vehicle Trips**

Proposed Project Component	Number of Truck Trips Per Day		Number of Worker Trips Per Day	
	Round Trips	One-Way Trips [a]	Round Trips[b]	One-Way Trips [a]
<b>Source Water Diversion and Storage Sites</b>				
- Salinas Pump Station	6	12	17	34
- Salinas Treatment Facility and Pipeline	35	70	24	48
- Reclamation Ditch	5	10	9	18
- Tembladero Slough	5	10	9	18
- Blanco Drain Pump Station and Pipeline	28	56	13	26
- Lake El Estero	5	10	8	16
<b>Treatment Facilities at Regional Treatment Plant</b>	20	40	33	66
<b>Product Water Conveyance System</b>				
- RUWAP Alignment: AWT Facility to Booster Pump Station to - Injection site [c]	5	10	13	26
- Booster Pump Station (RUWAP Alignment) [c]	3	6	18	36
- Coastal Alignment, AWT Facility to Booster Pump Station to Injection site [c]	6	12	13	26
- Booster Pump Station (Coastal Alignment) [c]	7	14	11	22
<b>Injection Well Facilities</b>				
- Injection Wells	16	32	26	52
- Back-flush Pipes and Basin	13	26	11	22
- Electrical Control	10	20	12	24
- Product Water Pipelines and Pumps	5	10	17	34
<b>CalAm Distribution System Pipeline</b>				
- Transfer	28	56	28	56
- Monterey	28	56	28	56
<p>NOTES:</p> <p>[a] Total trips would be dispersed over various roads and road segments and the construction schedules for many components would not overlap. These trip estimates would not represent increases in volumes on any one roadway during the construction period, except on Charlie Benson, which is the only vehicular access to the Regional Treatment Plant.</p> <p>[b] The maximum number of construction workers coming to each site from Table 4.17-4 was increased by 10% to develop the round-trip estimates in this table. This accounts for miscellaneous midday (or mid-shift) trips by some workers for meals and appointments.</p> <p>[c] Only one Product Water Conveyance System would be developed, but potential trips for both options are provided.</p>				



Only one Product Water Conveyance System would be developed, but potential trips for both options are provided in **Table 4.17-6, Estimated Maximum Daily Construction Vehicle Trips**. The RUWAP Alignment is slightly shorter than the Coastal Alignment; therefore the construction activity would be less. Worker and truck trips generated by concurrent construction activities at all Project sites would be dispersed throughout the day and throughout the regional road network, although construction worker trips are not anticipated in the PM peak hour as described above.

Most traffic analyses (including for analyses on projects for consistency with policies and ordinances) rely on an analysis of changes in an intersection or roadway Level of Service (LOS) standards of local jurisdictions in order to evaluate the long-term effects of projects on the operations of roadways and intersections. However, construction projects that increase traffic only temporarily, or that result in traffic fluctuations, do not have a long-term effect on level of service. In addition, most LOS analyses focus on the peak hours of traffic (typically morning and evening commute times). By contrast, many of the worker trips for the construction period would be outside of these typical peak hours as discussed above. Construction workers also are expected to commute to and from the construction work areas earlier and/or later than project-related construction truck trips, which are expected to be distributed throughout the day at any one work site. Additionally, daily traffic volumes on public roads typically vary from day to day by 5 to 10%, and any temporary increase in traffic due to construction would be within the typical daily fluctuation and would not be perceptible to the average motorist. Construction-related vehicle trips on local, two-lane roadways in the project area would not substantially affect traffic flow if the traffic volumes remained within the carrying capacity of the roads (roughly 10,000 to 15,000 vehicles per day for two-lane roads, depending on design features). For all of the reasons described above, the analysis of the Proposed Project construction traffic impacts focuses on overall roadway capacity and traffic safety, rather than the various cities' or the county's LOS standards.

Some regional routes, such as Highway 1, may be used for access to construction occurring at several sites, which could result in construction-related trips at some locations that are higher than the maximum number of daily vehicle trips associated with a single project component. **Tables 4.17-4 and 4.17-7** summarize major roadways that are expected to be utilized during construction of the Proposed Project, and which roads may be used by the various Proposed Project components. Daily and peak hour trips were estimated for each site based on the number of potential highway routes that could provide access to each Proposed Project site.

The following discussion provides a general description of the anticipated construction activity and resulting impacts for all Proposed Project components by geographic area. See **Table 4.17-4 and 4.17-6** for estimated construction duration and daily worker and truck trips. The following impact analysis is organized by geographic area from north to south.

**Table 4.17-7**  
**Major Roads Utilized During Project Construction**

Impact Title	Source Water Diversion and Storage Sites						Treatment Facilities at Regional Treatment Plant	Product Water Conveyance		Injection Well Facilities	CalAm Distribution System Pipelines
	Salinas Pump Station Diversion	Salinas Treatment Facility	Reclamation Ditch Diversion	Tembladero Slough Diversion	Blanco Drain Diversion (Pump Station and Pipeline)	Lake El Estero Diversion		RUWAP Alignment Option	Coastal Alignment Option		
Highway 101	✓	✓	✓		✓		✓			✓	
Highway 1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Highway 68	✓	✓	✓		✓					✓	
Highway 156	✓	✓	✓	✓	✓		✓	✓	✓	✓	
Highway 218										✓	
Highway 183	✓	✓	✓	✓	✓						
Davis Road	✓	✓	✓		✓						
Del Monte Blvd (Marina)						✓	✓		✓		✓
Reservation Road	✓	✓	✓		✓						
Imjin Road								✓			
Inter-Garrison Road								✓	✓		
Light Fighter Drive										✓	
General Jim Moore Blvd.								✓	✓	✓	
Seaside Streets										✓	✓
Del Monte Blvd (Seaside and Monterey)						✓				✓	✓
Pacific Grove Streets											✓

### *City of Salinas and Unincorporated North Monterey County*

The following sites are located in the areas west and south of the City of Salinas (the Salinas Pump Station Diversion site is surrounded by unincorporated Monterey County areas as an “island” even though it is considered within the City limits):

#### **Salinas Pump Station Diversion site**

The Salinas Pump Station Diversion site construction and improvements would occur over a period of five months. **Figure 4.17-2, Salinas and Monterey County Transportation Network** shows the footprint of the component with respect to the roadways in the vicinity. The structure lies at the dead-end of Hitchcock Road, surrounded by agricultural land, one single-family residence, and the City of Salinas Animal Services building.

Construction activities would occur 13 hours a day, six days a week. Construction access would be limited to Hitchcock Road, via one of the routes summarized on **Table 4.17-4**, which include Highways 1, 68, 101, and 183.

As shown on **Table 4.17-6**, construction at this site would be expected to result in up to approximately 34 daily construction worker daily trips that would be distributed throughout the road system. At worst-case, approximately nine daily trips would occur during the weekday morning peak period with the arrival of workers for the first work shift. The peak hour trips likely would be distributed between at least two routes with an estimated worst-case temporary traffic increase of approximately five AM peak hour trips on any one route during construction. Assuming approximately 10% of the total daily truck trips (two) could occur during the morning peak hour and also split among a minimum of two routes, construction traffic could result in seven peak hour trips along any one route. This would not be considered a substantial increase in peak hour trips due to the low volumes along these routes and the short duration of the construction period.

#### **Salinas Treatment Facility Storage and Recovery site**

The Salinas Treatment Facility Storage and Recovery site construction and improvements would occur over a period of seven months (June through December 2016) along the 33-inch industrial wastewater pipeline that would be slip-lined and another six months (April through September 2017) for the modifications to the Salinas Treatment Facility. **Figure 4.17-2** shows the footprint of the component with respect to the roadways in the vicinity. The structure lies just north of the Salinas River just west of the Davis Road Bridge, surrounded by agricultural land to the north and to the south on the other side of the river.

Over the component's construction, it is assumed that construction activities would occur 13 hours a day, six days a week. Construction access would be limited to Davis Road via one of the routes summarized on **Table 4.17-4**, which include Highways 1, 68, 101 and 183.

As shown on **Table 4.17-6**, construction would be expected to result in up to approximately 48 daily construction worker trips that would be distributed throughout the road system. At worst-case, approximately 12 worker trips would occur during the weekday morning peak period with the arrival of workers for the first work shift. The peak hour trips likely would be distributed between at least two routes with an estimated temporary traffic increase of approximately six morning peak hour trips on any one route during construction. Assuming approximately 10% of the total daily truck trips (seven) could occur during the morning peak hour and also split among a minimum of two routes, construction traffic could result in 13 peak hour trips along any one route. This would not be considered a substantial increase in peak hour trips due to the low volumes along these routes and the short duration of the construction period.

### Reclamation Ditch and Tembladero Slough Diversion sites

Construction of the Reclamation Ditch and Tembladero Slough Diversion sites would occur over a period of five months each. **Figure 4.17-2** shows the footprint of the component with respect to the roadways in the vicinity. The structures would be located along the drainage channels within the floodway area and would be accessed via driveways from major streets. Construction access would be via one of the routes summarized on **Table 4.17-4**, which include Highways 1, 183 and 101. For Tembladero Slough, the MRPWCA has an easement on the driveway to their Castroville Pump Station site. For the Reclamation Ditch, access would be provided via one of the following routes:

- Along the railroad easement on the north side of the tracks from the southeast and from Victor Way through a parking lot requiring a permit from Union Pacific Railroad and agreement with a private property owner.
- Along the railroad easement on north side of tracks from Boronda Road northwest of the site requiring a permit from Union Pacific Railroad
- Along dirt farm road on the south side of Reclamation Ditch from Boronda Road requiring easement from property owner or MCWRA.

Over the five months of project construction, it is assumed that construction activities would occur 11 hours a day, six days a week, between May 2017 and September 2017.

As shown on **Table 4.17-6**, construction at this site would be expected to result in up to approximately 18 daily construction worker trips that would be distributed throughout the road system. At worst-case, approximately nine worker trips would occur during the weekday morning peak period with the arrival of workers in the morning. The peak hour trips likely would be distributed between at least two routes with an estimated worse-case temporary traffic increase of approximately five AM peak hour trips on any one route during construction. Assuming approximately 10% of the total daily truck trips (1) could occur during the morning peak hour and also split among a minimum of two routes, construction traffic could result in six peak hour trips along any one route. This would not be considered a substantial increase in peak hour trips due to the low volumes along these routes and the short duration of the construction period.

### Blanco Drain Diversion (Pump Station and Pipeline)

The Blanco Drain Diversion Pump Station and Pipeline construction and improvements would occur over a period of nine months (April through December 2017) including activities on both the north and south side of the Salinas River. **Figure 4.17-2** shows the footprint of the component with respect to the roadways in the vicinity. The structure would lie just north of the Salinas River just west of the Blanco Road Bridge, surrounded by agricultural land to the north and to the south on the other side of the river.

Over the component's construction, it is assumed that construction activities would occur 11 hours a day, six days a week. Construction access would be limited to Davis Road, via one of the routes summarized on **Table 4.17-4**, which include Highways 1, 68, and 101.

As shown on **Table 4.17-6**, construction at this site would be expected to result in up to approximately 26 daily construction worker trips that would be distributed throughout the road system. At worst-case, approximately 13 worker trips would occur during the weekday morning peak period with the arrival of workers. The peak hour trips likely would be distributed between at least two routes with an estimated worse-case temporary traffic increase of approximately seven AM peak hour trips on any one route during construction. Assuming approximately 10% of the total daily truck trips (six) could occur during the morning peak hour and also split among

a minimum of two routes, construction traffic could result in 13 peak hour trips along any one route. This would not be considered a substantial increase in peak hour trips due to the low volumes along these routes and the short duration of the construction period.

### *County of Monterey, North of Marina*

Construction of the Treatment Facilities at the Regional Treatment Plant would occur entirely within the existing Regional Treatment Plant site, which is located within the unincorporated portion of Monterey County north of the City of Marina. Ingress and egress to the site is from a private road off of Charles Benson Road via Del Monte Boulevard; the facility is gated for security (see **Figure 4.17-2**).

This project component would have the longest construction duration of all the project components. Over the estimated 18 month construction period (plus three months of testing and start-up), it is assumed that construction activities would typically occur 13 hours a day, six days a week, although there would be periods of 24-hour per day construction activities. For the 24-hour construction scenario, a third work shift would be added in the evening, but would be outside of either the morning or afternoon/evening peak traffic periods. Construction access likely would be from Highway 1 or along Del Monte Boulevard as summarized on **Table 4.17-4**.

As shown on **Table 4.17-6**, construction at this site would be expected to result in up to approximately 66 daily construction worker trips that would be distributed throughout the road system. At worst-case, approximately 17 worker trips would occur during the weekday morning peak period with the arrival of workers for the first work shift. The peak hour trips likely would be distributed between at least two routes with an estimated worst-case temporary traffic increase of approximately eight AM peak hour trips on any one route during construction. Assuming approximately 10% of the total daily truck trips (four) could occur during the morning peak hour and also split among a minimum of two routes, construction traffic could result in 12 peak hour trips along any one route. This would not be considered a substantial increase in peak hour trips due to the low volumes along these routes and the short duration of the construction period.

Construction-related trips would also occur in the County area north of Marina as part of the construction of the Product Water Conveyance System. The pipeline would be sited along one of two options (**Figures 4.17-4, Marina Transportation Network and 4.17-5, Seaside Transportation Network**). The pipeline would be located primarily along paved roadway rights-of-way. For either option the northernmost segment would be within the unincorporated Monterey County area between the Regional Treatment Plant and Marina city limits.

During the construction of this segment, the same roadways would be utilized as for the Treatment Plant Facilities construction. As shown on **Table 4.17-6**, construction would be expected to result in up to 26 daily construction worker trips; at worst-case, approximately 13 worker trips would occur during the weekday morning peak period with the arrival of workers for the first work shift. The trips likely would be distributed between at least two routes, and almost all would occur along Highway 1 with an estimated temporary traffic increase of seven peak hour trips from either direction over the construction period. Assuming approximately 10% of the total daily truck trips (one) could occur during the morning peak hour, construction traffic could result in eight peak hour trips along any one route. This would not be considered a substantial increase in peak hour trips due to the low volumes along these routes and the short duration of the construction period.

### *City of Marina*

The Product Water Conveyance System and Booster Pump Stations would occur at one of two locations, depending on the pipeline alignment selected: RUWAP or Coastal (**Figures 4.17-1 and 4.17-4**).

The pipeline would be located primarily along paved roadway rights-of-way. Construction of the conveyance system would have the same general sequence of construction for either alignment option as follows: stake the alignment; where applicable, saw cut the pavement; string out pipe joints along the alignment as limited by encroachment permit and specifications; begin excavation; haul spoilage; set shoring or shield as necessary; install bedding material; lay pipe, weld joints (if steel or high density polyethylene pipe is selected); backfill and compact trench; place temporary paving. At busy intersections (Highway 1 and Reservation Road) bore and jack or directional drilling would occur.

A portion of the RUWAP pipeline alignment and the proposed RUWAP Booster Pump Station location are located within the City of Marina. The total construction period for this component is approximately 15 months, and it is estimated that construction of the segment within Marina would occur over five to seven months. It is assumed that construction schedule activities would occur 13 hours a day, six days a week. Construction access likely would be from Highway 1 or along Del Monte Boulevard as summarized on **Table 4.17-4**.

As shown on **Table 4.17-6**, construction would be expected to result in up to approximately 62 daily worker trips for construction of the both the pipeline for either alignment option and for the Booster Pump Station. At the worst case, approximately 16 worker trips would occur during the weekday morning peak period based on two work shifts. The peak hour trips likely would be distributed between at least two routes with an estimated temporary traffic increase of eight AM peak hour trips on any one route during construction. Assuming approximately 10% of the total daily truck trips (two) could occur during the morning peak hour, construction traffic could result in 10 peak hour trips along any one route. This would not be considered a substantial increase in peak hour trips due to the low volumes along these routes and the short duration of the construction period.

### *City of Seaside*

Construction of Proposed Project components within the City of Seaside include: the southern segment of the Product Water Conveyance System, including Coastal Booster Pump Stations, and the Injection Well Facilities. The pipeline would be located primarily along paved roadway rights-of-way. Construction access likely would be from Highway 1 to several local roads as summarized on **Table 4.17-4**.

The Coastal Alignment, the Booster Pump Station would be located at the northwest corner of the intersection of Divarty Street and Second Avenue either on an area that is within the City of Seaside or on CSUMB-owned land. Construction and staging would be maintained off the road and within the footprint of the Booster Pump Station.

Construction access would likely be from Highway 1 to several local roads as summarized on **Table 4.17-4**. The Coastal Alignment Booster Pump Station would be accessed from a driveway off of Divarty Street. Construction, construction traffic, and staging would be maintained entirely on the site and would not impede traffic or pedestrian lanes. As shown on **Table 4.17-5**.

As shown on **Table 4.17-6**, construction would be expected to result in up to approximately 48 daily worker trips for construction of the both the pipeline and for the Coastal Booster Pump Station. At the worst case, approximately 12 worker trips would occur during the weekday morning peak period based on two work shifts. The peak hour trips likely would be distributed

between at least two routes with an estimated temporary traffic increase of six AM peak hour trips on any one route during construction. Assuming approximately 10% of the total daily truck trips (three) could occur during the morning peak hour, construction traffic could result in nine peak hour trips along any one route. This would not be considered a substantial increase in peak hour trips due to the low volumes along these routes and the short duration of the construction period.

The proposed Injection Well Facilities would be located east of General Jim Moore, south of Eucalyptus Road in the City of Seaside, and would include a total of eight wells, monitoring wells, and back-flush facilities (**Figure 4.17-5**). Construction access to the Injection Well Facilities site likely would be from regional highways to General Jim Moore Boulevard as summarized on **Table 4.17-4**. Construction hours at this site are estimated to occur 24 hours/day, seven days/week, as feasible (with up to four work shifts) over an approximately 17-month construction period. The southernmost injection well site would be restricted to daytime hours: 7 AM to 8 PM. Construction access would be limited to General Jim Moore Boulevard and Eucalyptus Avenue.

As shown on **Table 4.17-6**, construction of the injection wells and associated controls would be expected to result in approximately 220 daily trips for construction that would be distributed throughout the road system. At worst-case, approximately 33 worker trips would occur during the weekday morning peak period with the arrival of workers for the first work shift. Construction of this project component would result in the most daily and peak hour trips of any project component. However, it would be expected that the trips would be split between three to four routes (i.e., east on Highway 68 and north or south on Highway 1) during the peak period, with an estimated worst-case temporary traffic increase 22 AM peak hour trips along any one route over the construction period. Assuming approximately 10% of the total daily truck trips (eight) could occur during the morning peak hour and also split among three routes, construction traffic could result in 25 peak hour trips along any one route. This would not be considered a substantial increase in peak hour trips due to the low volumes along these routes and the short duration of the construction period.

### *City of Monterey*

Lake El Estero Diversion site construction and improvements would occur at the north end of the lake as shown in **Figure 4.17-6, Monterey Transportation Network**. Improvements and construction to the source water system at the lake would be contained within the park and right-of-way adjacent to Del Monte Boulevard and would occur in the paved right-of-way and/or sidewalk, except for improvements at the Figueroa Street box culvert east of the lake.

Over the three months of project construction, it is assumed that construction activities would occur 13 hours a day, six days a week. Construction access likely would be from Highway 1 as summarized on **Table 4.17-4** or along Del Monte Boulevard.

As shown on **Table 4.17-6**, construction would be expected to result in approximately 26 daily trips; at worst-case, approximately eight worker trips would occur during the weekday morning peak period. The peak hour trips likely would be distributed between at least two routes with an estimated temporary traffic increase of approximately four peak hour trips along either route over a three-month construction period. Traffic flows along these routes would not be substantially affected by the short-term, three-month construction activities at Lake El Estero.

Depending on the location of each day's worksite, construction traffic for the Monterey Pipeline would access the pipeline alignment using Highway 1, Del Monte Boulevard, Highway 218, Del Monte Avenue, Figueroa Street, Franklin Street, High Street, Spencer Street, and Eardley Street. As shown on **Table 4.17-6**, construction would result in up to approximately 56 daily

construction worker trips that would be distributed throughout the road system. At worst-case, approximately 28 worker trips would occur during the weekday morning peak. The peak hour trips likely would be distributed between at least two routes with an estimated worst-case temporary traffic increase of approximately 14 AM peak hour trips on any one route during construction. Assuming approximately 10% of the total truck trips (three) could occur during the morning peak hour and also split among a minimum of two routes, construction traffic could result in 17 peak hour trips along any one route. This would not be considered a substantial increase in peak hour trips due to the low volumes along these routes and the short duration of the construction period.

### *Combined Construction-Related Traffic Increases*

As shown on **Table 4.17-6**, construction of the Proposed Project would generate traffic on Highway 1, although trips along Highway 1 for the components in Salinas and northern Monterey County area sites likely would only occur on the northern highway segments. It is likely that construction at the Treatment Facilities at the Regional Treatment Plant site, Conveyance Pipeline and Booster Station sites, and Injection Well Facilities site could result in overlapping construction schedules and all of these components could produce construction-related trips along Highway 1, especially the segment north of Monterey and south of the Regional Treatment Plant. Based on the above discussion, it is estimated that approximately 110 construction worker and truck trips would be distributed along Highway 1 during the weekday morning peak period. The most recent Caltrans traffic volume counts identify peak hour volumes of 7,800-8,000 trips at Fort Ord's main entrance, decreasing to 4,500 trips at Reservation Road (California Department of Transportation, 2013). The additional temporary construction trips represent approximately 1 to 2% of the peak hour trips. This would not be considered substantial and would be within the daily fluctuation of traffic volumes expected on the highway. Additionally, with the first work shift projected to start at 7:00 AM, most of the construction worker trips likely would occur outside the peak hour for morning traffic.

### *Impact Conclusion*

Project-related construction activities would result in a temporary increase in traffic from construction workers and trucks traveling to and from the construction work areas. The number of onsite workers would vary throughout the construction phases, and truck and equipment-related deliveries would be spread out over the construction work day. Construction of the Product Water Conveyance pipeline would occur over a 4-mile long alignment with a pipeline installation rate of approximately 250 feet per day within roadway rights-of-way and up to at a rate of up to 400 feet per day in open (undeveloped) areas. CalAm Distribution System pipeline construction would be performed at the anticipated installation rate of 150 to 250 feet per day. Given the anticipated split worker shifts, most of the daily traffic would be outside of the peak traffic periods, except for construction worker traffic in the morning.

Some regional routes, such as Highway 1, may be used for construction traffic to access several sites, which could result in increased trips along Highway 1 that are higher than the maximum number of daily vehicle trips associated with a single project component. However, the worst-case increases in traffic resulting from concurrent construction of project components during peak periods of construction would fall within the daily fluctuations of traffic on Highway 1.

Given the above, temporary construction traffic would not cause a substantial increase in traffic relative to existing conditions and roadway capacity, or contribute substantial volumes of traffic during peak hours at all of the Proposed Project sites. Generally, the



estimated maximum increase in traffic along regional roadways would remain within the carrying capacities of the regional roadways and would not substantially affect traffic flow, and the impact is less-than-significant. No mitigation measures are required.

**Impact TR-2: Construction-Related Traffic Delays, Safety and Access Limitations. Construction activities could result in temporary traffic delays, safety hazards, and/or disruption of access. (Criterion a) (Less-than-Significant with Mitigation)**

Construction activities at some sites and along pipeline construction sites could occur within vehicle travel lanes and/or road shoulders, which may require temporary lane closures and/or detours. These lane closures and detours would temporarily reduce roadway performance and result in temporary traffic delays during project construction, potentially affecting motorists, bicyclists, pedestrians, buses and/or emergency vehicles as discussed below. This would include potential disruption of access to residences, businesses, schools and/or recreational facilities. The movement of construction trucks could result in slower travel speeds and potential delays.

***City of Salinas, City of Monterey, and Unincorporated area of northern Monterey County***

The non-pipeline Proposed Project components would not involve construction within road rights-of-way and would not result in traffic delays or safety concerns due to temporary lane closures or detours. Since construction of the non-pipeline components would not be within roadways, construction at these Project sites would not impede vehicular, bicycle, or pedestrian traffic flow or disrupt public transportation. These components include all Source Water Diversion and Storage sites, except the Reclamation Ditch Diversion site and the slip lining of the 33 inch wastewater pipeline, Treatment Facilities at the Regional Treatment Plant, Booster Pump Station, and Injection Well Facilities. Neither the Salinas Pump Station Source Water Diversion and Storage site nor the Regional Treatment Plant site is located on or near any schools or recreational areas.

The Lake El Estero Diversion site construction also would not be located within the road rights-of-ways. The site is located within Lake El Estero Park; however, the short-term construction at this site would not affect access to the Lake El Estero Park, which is provided in numerous other parts of the park and by crossing Del Monte Boulevard from the ocean-front park.

The CalAm Distribution System improvements include installation of the Transfer and Monterey Pipelines. Pipeline installation would generally be accomplished using conventional open-trench methods, and is expected to proceed at an average pace of installation of approximately 150 to 250 linear feet of pipeline per day. (See discussion below for further information on pipeline installation methods and impacts.)

***City of Marina and City of Seaside – Product Water Conveyance System***

The Proposed Product Water Conveyance System (RUWAP and Coastal Alignment) would include installation of new pipelines within or adjacent to roads and recreational trails. **Table 4.17-4**, above, presents the roads that could be directly affected by project construction activities.

The RUWAP Alignment of the product water conveyance pipeline generally follows the RUWAP recycled water pipeline route through the City of Marina, CSUMB, and the City of Seaside to the proposed Injection Well Facilities site. The Coastal Alignment is proposed to run adjacent to Locke-Paddon Park, Fort Ord Dunes State Park, and within ½ mile of Vince Dimaggio Park. The southern portion of the Coastal Alignment would also be located in the former Fort Ord within

CSUMB and the City of Seaside. South of Palm Avenue, the pipeline would be approximately 100 feet east of play fields associated with the Marina Del Mar Elementary School and would be approximately 350 feet east of the nearest building associated with this school.

Pipeline installation would generally be accomplished using conventional open-trench methods; however, trenchless technologies such as boring and jacking or horizontal directional drilling would be used in specific areas, including through major intersections. The use of trenchless technologies typically does not reduce the number or available width of travel lanes (pits used for bore-and-jack and directional drilling are assumed to be located out of public roadways for this analysis). For example, jack-and-bore methods would be used to install pipelines beneath all major intersections, thus avoiding traffic flow disruptions and hazardous conditions for pedestrians or bicyclists. These intersections may include the following:

#### **Coastal Pipeline Alignment**

- TAMC rail line corridor where it crosses Del Monte Boulevard and Reservation Road,
- 2nd Avenue and Lightfighter Drive, and
- General Jim Moore Boulevard intersections with Normandy Road, Gigling Road, and Eucalyptus Road.

#### **RUWAP Pipeline Alignment**

- Crescent Avenue at Reservation Road,
- California Avenue at Imjin Parkway,
- 5<sup>th</sup> Avenue at Divarty Street, and
- General Jim Moore Boulevard intersections with Lightfighter Drive, Normandy Road, Gigling Road, and Eucalyptus Road.

Each roadway crossing presents unique conditions, and construction methods would vary depending on factors such as the available construction area, possible utility interference, and the contractor's preferred method of construction.

#### **Pipeline Construction**

The average trench width and depth for pipeline installation within roadways would be 6 feet by 8 feet, and the average pace of work would be 250 feet per day (except for the CalAm Distribution Pipelines, which would be 150 to 250 feet per day). The active work area along open trenches would be wider than the trenches themselves to accommodate access by trucks and loaders. Staging areas would be sited at strategic locations along the pipeline alignments, out of the roadway and flow of traffic.

Roadway segments that require construction in vehicle travel lanes or the adjacent road shoulder could experience temporary lane closures and/or detours to accommodate the construction zone. Some roadway segments would have sufficient pavement width outside of the construction zone to accommodate two-way traffic flow, but other roadways would not, and alternate one-way traffic flow would be maintained on pavement as narrow as 10 feet.

Where feasible and appropriate, construction contractors would install pipelines so as to avoid construction within vehicle travel lanes and to minimize impacts on roadway capacity and function. Detailed pipeline alignments and associated construction activities would be developed during project design. This analysis assumes that pipeline installation activities could require construction within or adjacent to vehicle travel lanes and could require temporary lane closures and/or detours.

### *Temporary Disruption to Transit, Bicycle and Pedestrian Facilities*

Project pipeline construction activities and truck trips could result in temporary delays and potential hazards for public buses, bicyclists and pedestrians. The greatest number of daily construction-related truck trips would occur along Highway 1 and Del Monte Boulevard. Since Highway 1 only accommodates motor vehicles, potential disruptions to non-automobile users would mostly occur along local roadways. During project construction, bicyclists and pedestrians could be required to enter the adjacent road shoulder or use other temporary detours to circumvent construction work areas.

Project construction activities could affect safety of bicyclists and pedestrians in the project area due to:

- Conflicts between haul trucks and other large construction vehicles (with slower speeds and wider turning radii than automobiles) and automobiles, bicyclists, and pedestrians using the roadways.
- Conflicts related to the movement of traffic on travel lanes adjacent to construction work areas, particularly at entry and egress points where construction-related vehicles would access public roadways.
- Confusion on the part of bicyclists and pedestrians due to temporary changes in bicycle and pedestrian circulation along the Monterey Peninsula Recreational Trail, designated bicycle routes, bike lanes, and other sidewalks and public pathways.

Product Water Conveyance System (RUWAP and Coastal Alignment) and CalAm Distribution System construction could temporarily affect public transportation, bicycle travel, and pedestrian travel along affected roadways and recreational trails.

Construction activities in vehicle travel lanes could disrupt access to bus stops operated by MST, require that bus stops be temporarily relocated, and/or conflict with bicycle traffic along roads with designated bike lanes. However, the Proposed Project pipeline construction would not prevent use of any roads on which public transit routes operate, and neither would it generate increased construction-related traffic volumes on roads used for public transit routes at a level that would result in lengthy delays for transit riders.

Construction-related impacts on alternative transportation modes and facilities during pipeline installation activities would be potentially significant. Installation of the Product Water Conveyance pipeline and CalAm Distribution System pipelines is expected to occur at a rate of approximately 150 to 250 feet per day within roadway rights of way. Thus, any one segment of the roadway and/or recreational trail would be affected for a short duration.

Approximately four miles of the Product Water Conveyance System pipeline would be installed within or adjacent to a segment of the regional recreation trail during ten months of project construction. Pipeline installation activities along the Monterey Peninsula Recreational Trail and TAMC right-of-way could temporarily require detours for bicycle and pedestrian traffic along the trails. However, the multiuse regional recreational trail on the west side of Highway 1 would not be disrupted and would remain open throughout construction, and there are multiple access points to Fort Ord Dunes State Park along that publicly accessible trail. The project may temporarily restrict public bicycle and pedestrian access in the Divarty Street undercrossing of Highway 1 during construction of the Coastal Alignment; however, the State Park maintains the main designated access point to the Fort Ord Dunes State Park at Eighth Street, which would remain open and available to public access at the time of construction of the pipeline.

The Injection Well Facilities site is located within ½ mile of Encanto Park, a Class I bike path (General Jim Moore Boulevard), and a Class III bike route (Hilby Avenue). The construction at

this site would be located away from these recreational facilities, and no direct disruption of access to these recreational sites would occur. The Injection Well Facilities are proposed within the City of Seaside on property located immediately adjacent to the boundary with the U.S. Bureau of Land Management open space that has recently been designated as the Fort Ord National Monument. The land is currently owned by the Fort Ord Reuse Authority. The land on both sides of the boundary between the City of Seaside and the Bureau of Land Management land is currently closed to the public due to ongoing military munitions cleanup activities; therefore, construction of the Injection Well Facilities is not anticipated to result in significant impacts on access to adjacent public open space areas. See **4.9 Hazards and Hazardous Materials** for more information on the status of military munitions clean-up activities at the Injection Well Facilities site.

The construction activities associated with all other Proposed Project components could have temporary and intermittent effects on traffic flow and may cause delays for Monterey-Salinas Transit bus service on some segments of roadway. Delays and interruptions would be temporary and would be dependent on the type of roads and area where the segment is being constructed. While buses could be slowed by project construction trucks on nearby roads used as haul routes, a greater potential effect would occur on roads where construction occurs.

### *Emergency Access Delays*

#### **City of Marina and City of Seaside**

As discussed above, installation of the Product Water Conveyance System (RUWAP and Coastal Alignment) could require construction within some vehicle travel lanes and road shoulders. Temporary reductions in travel lanes and the roadway capacities to accommodate work areas could result in delays for emergency vehicles. Trenching and paving along roadways during pipeline installation could also disrupt emergency vehicle access to adjacent land uses. This impact is potentially significant.

#### **City of Salinas, Monterey, Unincorporated area of northern Monterey County, City of Marina, City of Seaside**

Construction activities and staging areas for non-linear components (Source Water Diversion and Storage sites, Treatment Facilities at the Regional Treatment Plant, Booster Pump Stations) are not expected to require construction in roadways or road shoulders. As such, construction of these facilities would not obstruct access for emergency vehicles in the vicinity of the construction work areas. Therefore, impacts related to disrupted access to adjacent land uses for emergency vehicles would be less-than-significant for these components. As discussed above, installation of the CalAm Distribution System (Monterey and Transfer pipelines) could require construction within some vehicle travel lanes and road shoulders. Temporary reductions in travel lanes and the roadway capacities to accommodate work areas could result in delays for emergency vehicles. Trenching and paving along roadways during pipeline installation could also disrupt emergency vehicle access to adjacent land uses. This impact is potentially significant.

### *Impact Conclusion*

Traffic delays, safety hazards and access limitations resulting from temporary lane closures and detours could result in delays to motorists and would be a potentially significant impact for bicyclists, pedestrians, transit operations, and emergency access during construction of the Product Water Conveyance pipeline and the CalAm Water Distribution System – Transfer Pipeline and Monterey Pipeline, but the effects would be short-term in duration for any one location. As outlined in **Subsection 4.17.4.2**,

construction would require issuance of encroachment permits from the cities of Marina, Seaside, Monterey, and Pacific Grove, and the County of Monterey for any construction within public rights-of-ways. However, with implementation of Mitigation Measure TR-2 (Traffic Control and Safety Assurance Plan), which includes measures to minimize the adverse effects of roadway construction and detours, these impacts would be reduced to a less-than-significant level.

### *Mitigation Measures*

#### **Mitigation Measure TR-2: Traffic Control and Safety Assurance Plan. (Applies to Product Water Conveyance: Both Options, and CalAm Distribution System.)**

Prior to construction, MRWPCA and/or its contractor shall prepare and implement a traffic control plan or plans for the roadways and intersections affected by MRWPCA construction (Product Water Conveyance Pipeline) and CalAm shall prepare and implement a traffic control plan for the roadways and intersections affected by the CalAm Distribution System Improvements (Transfer and Monterey pipelines). The traffic control plan(s) shall comply with the affected jurisdiction's encroachment permit requirements and shall be based on detailed design plans. For all project construction activities that could affect the public right-of-way (e.g., roadways, sidewalks, and walkways), the plan shall include measures that would provide for continuity of vehicular, pedestrian, and bicyclist access; reduce the potential for traffic accidents; and ensure worker safety in construction zones. Where project construction activities could disrupt mobility and access for bicyclists and pedestrians, the plan shall include measures to ensure safe and convenient access would be maintained.

The traffic control and safety assurance plan shall be developed on the basis of detailed design plans for the approved project. The plan shall include, but not necessarily be limited to, the elements listed below:

#### *General*

- a. Develop circulation and detour plans to minimize impacts on local streets. As necessary, signage and/or flaggers shall be used to guide vehicles to detour routes and/or through the construction work areas.
- b. Implement a public information program to notify motorists, bicyclists, nearby residents, and adjacent businesses of the impending construction activities (e.g., media coverage, email notices, websites, etc.). Notices of the location(s) and timing of lane closures shall be published in local newspapers and on available websites to allow motorists to select alternative routes.

#### *Roadways*

- c. Haul routes that minimize truck traffic on local roadways and residential streets shall be used to the extent feasible.
- d. Schedule truck trips outside of peak morning and evening commute hours to minimize adverse impacts on traffic flow.
- e. Limit lane closures during peak hours. Travel lane closures, when necessary, shall be managed such that one travel lane is kept open at all times to allow alternating traffic flow in both directions along affected two-lane roadways; the contractor shall use steel plates or trench backfilling to restore vehicle access at the end of each workday.

- f. Restore roads and streets to normal operation by covering trenches with steel plates outside of normal work hours or when work is not in progress.
- g. Comply with roadside safety protocols to reduce the risk of accidents. Provide “Road Work Ahead” warning signs and speed control (including signs informing drivers of state-legislated double fines for speed infractions in a construction zone) to achieve required speed reductions for safe traffic flow through the work zone. Train construction personnel to apply appropriate safety measures as described in the plan.
- h. Provide flaggers in school areas at street crossings to manage traffic flow and maintain traffic safety during the school drop-off and pickup hours on days when pipeline installation would occur in designated school zones.
- i. Maintain access to private driveways.
- j. Coordinate with MST so the transit provider can temporarily relocate bus routes or bus stops in work zones as deemed necessary.

#### *Pedestrian and Bicyclists*

- k. Perform construction that crosses on-street and off-street bikeways, sidewalks, and other walkways in a manner that allows for safe access for bicyclists and pedestrians. Alternatively, provide safe detours to reroute affected bicycle/pedestrian traffic.

#### *Recreational Trails*

- l. At least two weeks prior to construction, post signage along all potentially affected recreational trails; Class I, II, and III bicycle routes; and pedestrian pathways, including the Monterey Peninsula Recreational Trail, to warn bicyclists and pedestrians of construction activities. The signs shall include information regarding the nature of construction activities, duration, and detour routes. Signage shall be composed of or encased in weatherproof material and posted in conspicuous locations, including on park message boards, and existing wayfinding signage and kiosks, for the duration of the closure period. At the end of the closure period, CalAm, MRWPCA or either of its contractors shall retrieve all notice materials.

#### *Emergency Access*

- m. Maintain access for emergency vehicles at all times. Coordinate with facility owners or administrators of sensitive land uses such as police and fire stations, transit stations, hospitals, and schools.
- n. Provide advance notification to local police, fire, and emergency service providers of the timing, location, and duration of construction activities that could affect the movement of emergency vehicles on area roadways.
- o. Avoid truck trips through designated school zones during the school drop-off and pickup hours.

**Impact TR-3: Construction-Related Roadway Deterioration. Construction truck trips could result in increased wear-and-tear on the designated haul routes, which could result in temporary impacts to performance of the regional circulation system. (Criterion a) (Less-than-Significant with Mitigation)**

The use of trucks to transport equipment and material to and from the construction work areas could affect road conditions on the designated haul routes by increasing the rate of road wear. The degree to which this impact would occur depends on the roadway design (pavement type and thickness) and the existing condition of the road. Freeways and major arterials (Highways 1, 68, 101, 156, 183, and 218) are designed to handle a mix of vehicle types, including heavy trucks; therefore, the significant roadway deterioration impacts of project-related construction traffic is not expected to occur on those roads. However, some of the local roadways may not have been constructed to support use by heavy construction trucks and vehicles, and project-related construction truck trips could cause excessive wear-and-tear on these roadways, which is a potentially significant impact. Implementation of Mitigation Measure TR-3 (Roadway Rehabilitation Program), which requires rehabilitation of any roadways damaged following construction, would reduce this impact to a less-than-significant level.

***Impact Conclusion***

The use of trucks to transport construction equipment and materials could adversely affect road conditions on local roadways. However, with implementation of Mitigation Measure TR-3 (Roadway Rehabilitation Program), this impact would be reduced to a less-than-significant level.

***Mitigation Measure***

**Mitigation Measure TR-3: Roadway Rehabilitation Program (applies to all Proposed Project components)**

Prior to commencing project construction, MRWPCA (for all components other than the CalAm Distribution System Improvements) and CalAm (for CalAm Distribution System Improvements) shall detail the preconstruction condition of all local construction access and haul routes proposed for substantial use by project-related construction vehicles. The construction routes surveyed must be consistent with those identified in the construction traffic control and safety assurance plan developed under Mitigation Measure TR-2. After construction is completed, the same roads shall be surveyed again to determine whether excessive wear and tear or construction damage has occurred. Roads damaged by project-related construction vehicles shall be repaired to a structural condition equal to that which existed prior to construction activities.

**Impact TR-4: Construction Parking Interference. Construction activities may temporarily affect parking availability. (Criterion a) (Less-than-Significant with Mitigation)**

During construction, workers would drive their own vehicles to the component staging area or Proposed Project component construction site, which could result in an increased parking demand at certain locations. Parking demand would vary among the individual project components and would also depend on the construction phase and the nature of construction activities. Depending on the width of the vehicle travel lanes or adjacent road shoulders, construction activities could temporarily displace parking spots and adversely affect parking conditions due to worker parking demands, including parking in the Coastal Zone (i.e. for the

Product Water Conveyance Coastal Alignment Option and the Monterey Pipeline) and near parks, such as the Fort Ord Dunes State Park for the Coastal Alignment Option. Roadways and on-street parking that could be directly affected by project construction activities are shown in **Table 4.17-4**.

#### *Pipelines in City of Marina and City of Seaside Streets/Roadways*

Installation of the Proposed Product Water Conveyance Pipeline (RUWAP and Coastal Alignment) could temporarily displace on-street parking due to worker parking demand and direct use of spaces for construction (for segments of road where on-street parking is available, see **Figures 4.17-4 and 4.17-5**, and **Table 4-16-4, Applicable State, Regional, and Local Land Use Plans and Policies Relevant to Public Services, Utilities, and Recreation**). Therefore, impacts related to parking interference during pipeline construction within road rights-of-way would be potentially significant.

#### *Facilities off of Roadways in City of Salinas, Unincorporated area of northern Monterey County, City of Marina, and City of Seaside*

Construction of all non-linear facilities (Salinas Pump Station Diversion site, Advanced Water Treatment Facilities at the Regional Treatment Plant, Product Water Booster Pump Station, and Injection Well Facilities) would be set back from roadways, bike and pedestrian pathways, and public access to parking; therefore, construction of these components would have no impact on parking. Further, construction worker parking demand for all of the aforementioned non-linear structures would be accommodated within the construction site or nearby streets which can accommodate on-street parking due to lack of existing parking demands in the vicinity of all of these facilities. Thus, no impact would result.

#### *Monterey and Transfer Pipelines in Sand City, Seaside, Monterey and Pacific Grove*

Some roadways in the project area for the Monterey and Transfer Pipelines have a lack of demand for the available on street parking spaces, and alternative parking spaces are present nearby the proposed pipeline alignment. Installation of the proposed Transfer Pipeline and Monterey Pipeline (i.e., through commercial areas and residential neighborhoods in the City of Seaside, and commercial and residential areas in Monterey) would displace parking spaces and require use of parking spaces for construction workers along the affected roadways that have on-street parking. Therefore, impacts related to parking interference during pipeline construction within road rights of-way would be potentially significant. Implementation of Mitigation Measure TR-4 (Construction Worker Parking Requirements) would reduce this impact to a less-than-significant level.

#### *Impact Conclusion*

Construction of the Source Water Diversion and Storage components, Treatment Facilities at the Regional Treatment Plant, Product Water Booster Pump Station (RUWAP and Coastal Alignment), and Injection Well Facilities would have no impact on parking. However, project construction activities associated with some segments of the RUWAP and Coastal alignments of the Product Water Conveyance Pipeline and the CalAm Distribution System: Monterey and Transfer Pipelines could result in potentially significant parking impacts due to temporary increases in parking demand and the displacement of on-street parking along pipeline alignment corridors. Implementation of Mitigation Measure TR-4 (Construction Parking Requirements) would reduce this impact to a less-than-significant level.



### *Mitigation Measure*

#### **Mitigation Measure TR-4: Construction Parking Requirements. (Applies to Product Water Conveyance pipelines (RUWAP and Coastal Alignments) in Marina and Seaside, and CalAm Distribution System: Transfer Pipeline and Monterey Pipeline)**

Prior to commencing project construction, the construction contractor(s) shall coordinate with the potentially affected jurisdictions to identify designated worker parking areas that would avoid or minimize parking displacement in congested areas of Marina, Seaside, and downtown Monterey. The contractors shall provide transport between the designated parking location and the construction work areas. The construction contractor(s) shall also provide incentives for workers that carpool or take public transportation to the construction work areas. The engineering and construction design plans shall specify that contractors limit time of construction within travel lanes and public parking spaces and provide information to the public about locations of alternative spaces to reduce parking disruptions.

#### **4.17.4.4 Operational Impacts and Mitigation Measures**

##### **Impact TR-5: Operational Traffic. Operation and maintenance of the Proposed Project would result in small traffic increases on regional and local roadways, but would not substantially affect the performance of the regional circulation system. (criterion a) (Less-than-Significant)**

Daily traffic would be generated by operations and maintenance personnel working at the facilities. Up to a total of nine new employees would be hired for operation and maintenance of all Proposed Project components.

##### *Source Water Diversion and Storage sites*

The Reclamation Ditch source water diversion site would require only approximately one new employee visit to the site approximately three times per week to perform routine inspection and maintenance. No new employees would be required at any of the other source water diversion and storage sites, and no ongoing materials delivery or solid waste generation would occur at these sites.

##### *Treatment Facilities at Regional Treatment Plant*

Up to five new employees would be needed at the Treatment Facilities at the Regional Treatment Plant site daily to perform routine operational, inspection and maintenance; occasional ongoing materials delivery and solid waste transport (i.e., to the landfill adjacent to the site) would occur, resulting in two additional trucks traveling to and from the site each day.

##### *Product Water Conveyance Facilities*

The proposed pump stations could operate continuously for up to 24 hours a day. Although pump stations would typically be operated remotely via a “supervisory control and data acquisition” (SCADA) system, facility operators would conduct routine visits to the pump station sites up to three times daily to monitor operations, conduct general maintenance activities, and service the pumps. General operations and maintenance activities associated with pipelines would include annual inspections of the cathodic protection system and replacement of sacrificial anodes when necessary; testing and servicing of valves; vegetation maintenance along rights-of-way; and repairs of minor leaks in buried pipeline joints or segments. Operation

of the proposed pump stations would necessitate up to one new employee, and one truck trip to the site per day.

### *Injection Well Facilities*

Injection wells and associated electrical and mechanical systems could operate 24 hours per day, seven days per week throughout the year, although it is highly unlikely that all eight wells would be actively injecting at the same time for any length of time. Up to two new employees would be needed at the Injection Well Facilities site daily to perform routine operational, inspection and maintenance activities. Operations and maintenance staff would come to the Injection Well Facilities site most likely Monday through Friday nearly every week. In addition to operation and maintenance of the wells, the workers would inspect above-ground valves and appurtenances to assure they are properly functioning. No truck trips to and from the site are anticipated on a regular basis.

### *CalAm Distribution System*

General operations and maintenance activities associated with pipelines would include annual inspections of the cathodic protection system and replacement of sacrificial anodes when necessary; testing and servicing of valves; vegetation maintenance along rights-of-way; and repairs of minor leaks in buried pipeline joints or segments. The vehicle trips generated by these routine and periodic site visits would be similar in number to those required for existing CalAm operations in the Monterey District service area and would not constitute a significant increase in new vehicle trips on area roadways. Overall, any increases in traffic generated by facility operations and maintenance are estimated as four trips and would be negligible compared to existing conditions and would not result in a noticeable increase in traffic on adjacent streets. Therefore, the long-term traffic impact for these facilities would also be less-than-significant.

### *Impact Conclusion*

Operation and maintenance activities would not generate a significant increase in traffic to the existing circulation system, or result in a level of service degradation over the long-term. A total of nine potential new employees would result in an increase of approximately 18 daily trips spread out among the applicable component sites. Approximately half of the trips would be to the Regional Treatment Plant site north of the City of Marina. The number of daily vehicle trips associated with worker commutes, deliveries, and activities associated with the operation and maintenance of all project facilities would be small relative to existing conditions. Approximately four daily trips by existing employees for general maintenance along the CalAm Distribution Pipelines would be spread throughout the road system and would have a noticeable effect on traffic conditions.

Operation and routine maintenance of the Proposed Project would not substantially increase traffic volumes on local or regional roadways; therefore, the impact would be less-than-significant and no mitigation measures are required.

#### **4.17.4.5 Cumulative Impacts**

The geographic scope for the analysis of cumulative impacts on transportation and circulation consists of the roadways affected by the Proposed Project and the areas in northern Monterey County that use the same roadways as the Proposed Project. A list of cumulative projects is provided on **Table 4.1-2, Project Considered for Cumulative Analysis**, and the cumulative project locations are shown on **Figure 4.1.1, Cumulative Projects Location Map** (see **Section 4.1, Introduction**). Cumulative projects that would result in permanent traffic increases include

development projects primarily within the cities of Marina and Seaside and within areas in the former Fort Ord military base. Relevant projects with potential traffic impacts that could combine with traffic impacts resulting from the Proposed Project are summarized below. The cumulative projects are cross-referenced (in parentheses) to the project number on **Table 4.1-2**.

The discussion of cumulative impacts is organized to address the combined impacts of the Proposed Project plus the MPWSP (with the 6.4 mgd desalination plant) and then to address the overall combined impacts of the Proposed Project and all relevant projects identified on **Table 4.1-2** for the cumulative analysis:

- Combined Impacts of Proposed Project Plus MPWSP (with 6.4 mgd Desalination Plant) (referred to as the MPWSP Variant).*<sup>3</sup> The CalAm Monterey Peninsula Water Supply Project includes: a seawater intake system; a source water pipeline; a desalination plant and appurtenant facilities; desalinated water conveyance facilities, including pipelines, pump stations, a terminal reservoir; and an expanded ASR system, including two additional injection/extraction wells (ASR-5 and ASR-6 Wells), a new ASR Pump Station, and conveyance pipelines to convey between the well. The CalAm Distribution Pipelines (Transfer and Monterey) would be constructed for either the MPWSP or GWR project. The cumulative impact analysis in this EIR anticipates that the Proposed Project could be combined with a version of the MPWSP that includes a 6.4 mgd desalination plant. Similarly, the MPWSP EIR is evaluating a “Variant” project that includes the proposed CalAm Facilities (with the 6.4 mgd desalination plant) and the Proposed Project. The impacts of the Variant are considered to be cumulative impacts in this EIR. The CalAm and GWR Facilities that comprise the MPWSP Variant are shown in **Appendix Y**.
- Overall Cumulative Projects:* This impact analysis is based on the list of cumulative projects provided on **Table 4.1-2** (see **Section 4.1**). The overall cumulative impacts analysis considers the degree to which all relevant past, present and probable future projects (including the MPWSP (with the 6.4 mgd desalination plant) could result in impacts that combine with the impacts of the Proposed Project.

*Combined Impacts of Proposed Project Plus MPWSP (with 6.4 mgd Desalination Plant).* Both the Monterey Peninsula Water Supply Project desalination plant and the Proposed Project Treatment Facilities at the Regional Treatment Plant would be located in the unincorporated area of Monterey County within a distance of approximately 0.5 miles. The Transmission Pipeline component of the MPWSP would be in the similar location as a segment of the Proposed Project Product Water Conveyance Coastal Alignment pipeline along the Transportation Agency’s rail line corridor. Both the MPWSP and GWR projects include installation of new wells in the Seaside area. However, the well locations would be approximately 0.5 miles from each other.

**Table 4.17-5** provides a summary of potential impacts related to traffic and transportation and significance determinations at each Proposed Project component site. The MPWSP would have a similar effect on local roadways due to construction trips as the Proposed Project. Construction of the GWR facilities would overlap with construction of the CalAm facilities for approximately 18 months. Temporary construction traffic would increase in combination with the

<sup>3</sup> The October 2012 Notice of Preparation of an EIR for the MPWSP describes an alternative to the MPWSP that would include a smaller desalination plant combined with the Proposed GWR Project (CPUC 2012). Based on ongoing coordination with the CPUC’s EIR consultants, this alternative is referenced as the “Variant” and includes a 6.4 mgd desalination plant that was proposed by CalAm in amended application materials, submitted in 2013 to the CPUC (CPUC, 2013).

construction-related traffic associated with the Cal-Am facilities, but most construction traffic would be distributed along different roadways. Assuming a worse-case scenario of overlapping construction at all GWR and CalAm Facilities along Highway 1 (the major regional roadway), the combined temporary traffic from construction of both CalAm and GWR facilities would result in an increase in average daily trips on the highway of two percent or less. This temporary increase would be within daily traffic fluctuations along the highway and would not cause a substantial increase in traffic relative to existing conditions and roadway capacity, or contribute substantial volumes of traffic during peak hours. Implementation of traffic control plans and other measures by both projects would minimize temporary delays and impacts on roadways and to bicycle, pedestrian, and transit systems. Therefore, no significant cumulative construction-related impacts would result from the two projects.

Once constructed, operations and maintenance associated with each project would result in limited traffic. Both the desalination plant proposed by CalAm and Proposed Project Treatment Facilities at the Regional Treatment Plant would be located in the unincorporated area of Monterey. Long-term operations of the desalination plant would generate approximately 33 round-trips (66 one-way trips) per day (60 commute trips and six for deliveries). The greatest long-term increase in vehicle trips from MPWSP Desalination Plant operations would occur on Charles Benson Road, which is also the local road that would be used for access to the Regional Treatment Plant (the site of new treatment facilities of the Proposed Project). As indicated above the Proposed Project would generate five new employees at this location. Based on existing traffic conditions and the industrial nature of the surrounding land uses on Charles Benson Road, the estimated traffic increase of both projects would be well within the roadway carrying capacity of this two-lane road and would not affect road operations or performance. There would be minimal traffic associated with operation of the other components of either the MPWSP or GWR project. Thus, there would be no significant cumulative traffic impacts resulting from the construction or operation of the two projects.

*Overall Cumulative Impacts.* Cumulative projects are shown on **Table 4.1-2** (see **Section 4.1**), and cumulative project locations are shown on **Figure 4.1.1**. The cumulative projects are cross-referenced (in parentheses) to the project number on **Table 4.1-2**. None of the identified cumulative projects that are in close proximity to the Proposed Project are known to have overlapping construction schedules that would result in cumulative construction traffic impacts, except for the Monterey Peninsula Water Supply Project (with 6.4mgd desalination plant) (#1); the City of Salinas Solar Project (#34) and projects within the City of Marina. The City of Salinas Solar Project (#34) includes construction of solar panels on approximately 18 acres at the Salinas Treatment Facility Station site. The project would be constructed starting in 2015 and ending in 2016. There may be a brief period of overlap of the construction at the proposed Salinas Pump Station Diversion site, where construction is planned to begin in July of 2016. Construction trips from both projects would be spread out throughout the day and various routes and would not result in a significant temporary cumulative impact related to construction traffic.

Construction of segments of the proposed Product Water Conveyance Pipeline (both alignment options) and the RUWAP booster station within the City of Marina would be in proximity to the planned CSUMB projects (#16, #17) and the Dunes on Monterey Bay Project (#10). According to the currently available information, the timing of construction of the CSUMB housing project would be constructed prior to construction of the Proposed Project, and the timing of the CSUMB academic building is unknown. There may be brief periods in which construction of the Product Water Conveyance Pipeline may occur in proximity to construction phases of the Dunes project. However, given the limited duration of potential overlap of construction schedules and the distribution of construction traffic among numerous local roadways, there would be no significant cumulative construction-related traffic impacts in Marina.

Development projects, primarily in the cities of Marina and Seaside and within areas in the former Fort Ord military base, would result in substantial new residential, commercial, and institutional development, resulting in substantial increases in traffic on Highway 1 and on local streets. Based on the list of cumulative projects provided on **Table 4.1-2** (see **Section 4.1**), cumulative developments that could generate substantial traffic include: East Garrison (#3), the Dunes on Monterey Bay (#10), Monterey Shores Resort (#9), CSUMB projects (#16,17), West Broadway Specific Plan (#21), Seaside Resort and Monterey Downs (#22, 24), and Fort Ord Dunes State Park Campground (#34). Cumulative development could result in nearly 190,000 daily trips with approximately 11,300 trips in the AM peak hour and 18,200 trips in the PM peak hour (EIP Associates, February 2005). Cumulative development would result in significant cumulative traffic impacts at intersections along 2nd Avenue and General Jim Moore Boulevard and along some roadway segments including Highway 1 between Lightfighter Drive and 12th Street. A number of intersection and roadway improvements have been identified for the area, as well as project-specific mitigation measures, that would mitigate cumulative traffic impacts at most but not all intersections (EIP Associates, February 2005). Buildout of the East Garrison project also would result in potentially significant impacts to intersections along Davis Road. Therefore, cumulative development could result in significant cumulative traffic impacts along segments of Highway 1 and on local roads within the cities of Seaside and Marina, and portion of unincorporated Monterey County along Davis Road.

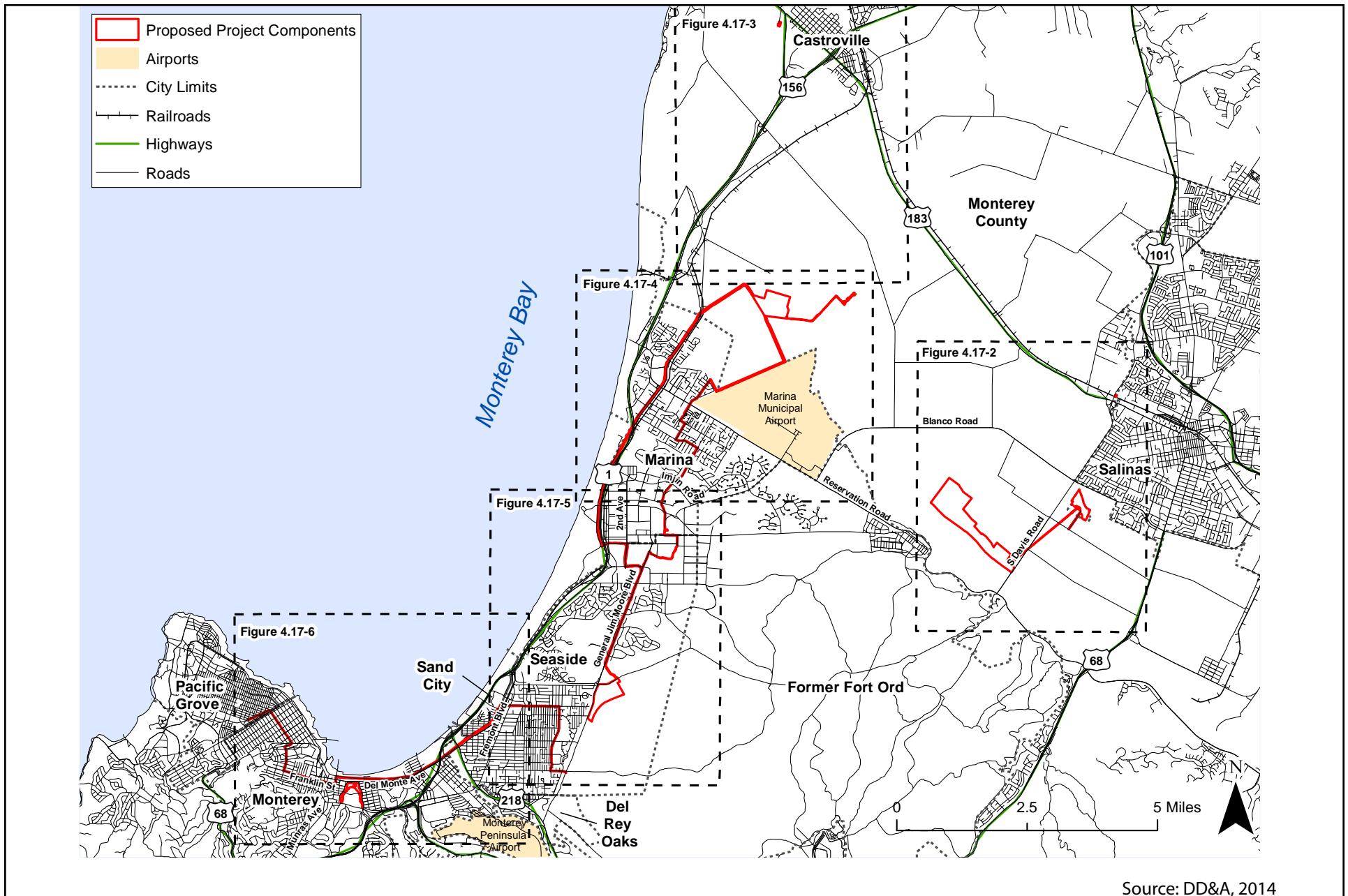
The Proposed Project would only result in nine new permanent employees, most of whom would be employed at the Advanced Water Treatment Facility (five employees), resulting in an estimated five trips in the either AM or PM peak hours. This amount of traffic would be negligible in comparison to the amount of traffic generated by cumulative development and would not result in a noticeable change in traffic operations. Furthermore, some employee shifts may start outside of peak hours. The remaining four new employees would be distributed among three project sites (Reclamation Ditch, Product Water Booster Pump Station, Injection Well Facilities site). The trips associated with these employees would be distributed among different roadways, and would result in minor peak hour trip increase of one to two trips at any location. For these reasons, the Proposed Project's contribution to significant cumulative traffic impacts would not be cumulatively considerable.

### *Cumulative Impact Conclusion*

Construction of the MPWSP Transmission Pipeline and GWR Product Water Conveyance Pipeline Coastal Alignment may have overlapping or close construction schedules, and construction of the MPSWP desalination plant and Proposed Project Treatment Facilities at the Regional Treatment Plant would be located within a distance of 0.5 miles. Construction of both projects would not result in significant cumulative construction or operational traffic impacts. There are no other identified cumulative construction-related traffic impacts to which the Proposed Project would contribute, except potentially at the Salinas Pump Station Diversion site and in the City of Marina, in which there would be less-than-significant cumulative construction traffic impacts. Cumulative development could result in significant cumulative traffic impacts along segments of Highway 1 and on local roads within the cities of Seaside and Marina, and a portion of unincorporated Monterey County, primarily within areas of the former Fort Ord military base and along segments of Highway 1 within Seaside and Marina. However, operation of the Proposed Project would result in minimal new trips that would be split among different work shifts and distributed along different roadways, resulting in minor peak hour trip increase of one to two trips at any location. Therefore, the Proposed Project's contribution to significant cumulative traffic impacts due to cumulative development projects would not be cumulatively considerable.

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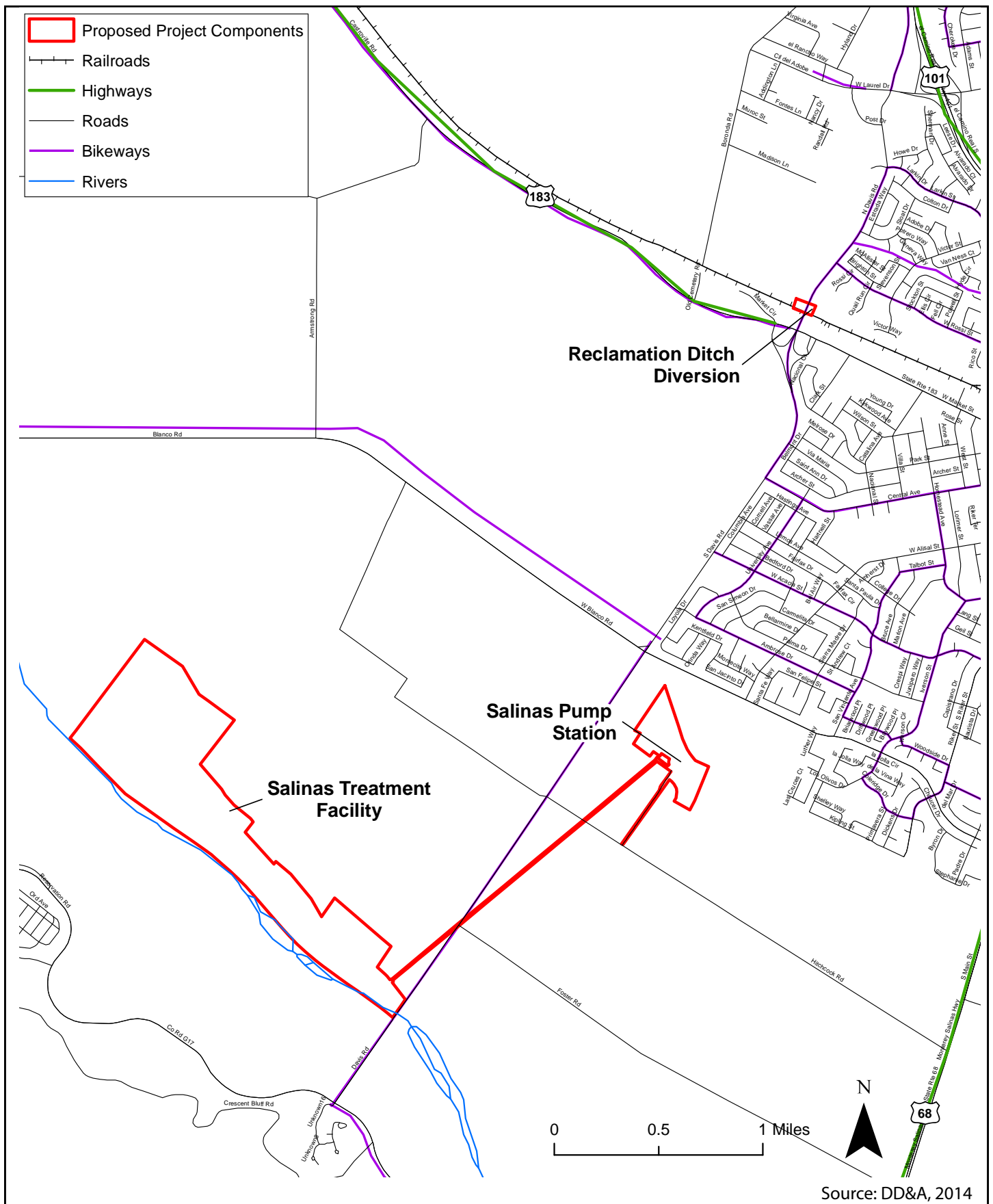
## Regional Transportation Network

April 2015

Pure Water Monterey GWR Project  
Draft EIR

Figure  
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# Salinas and Monterey County Transportation Network

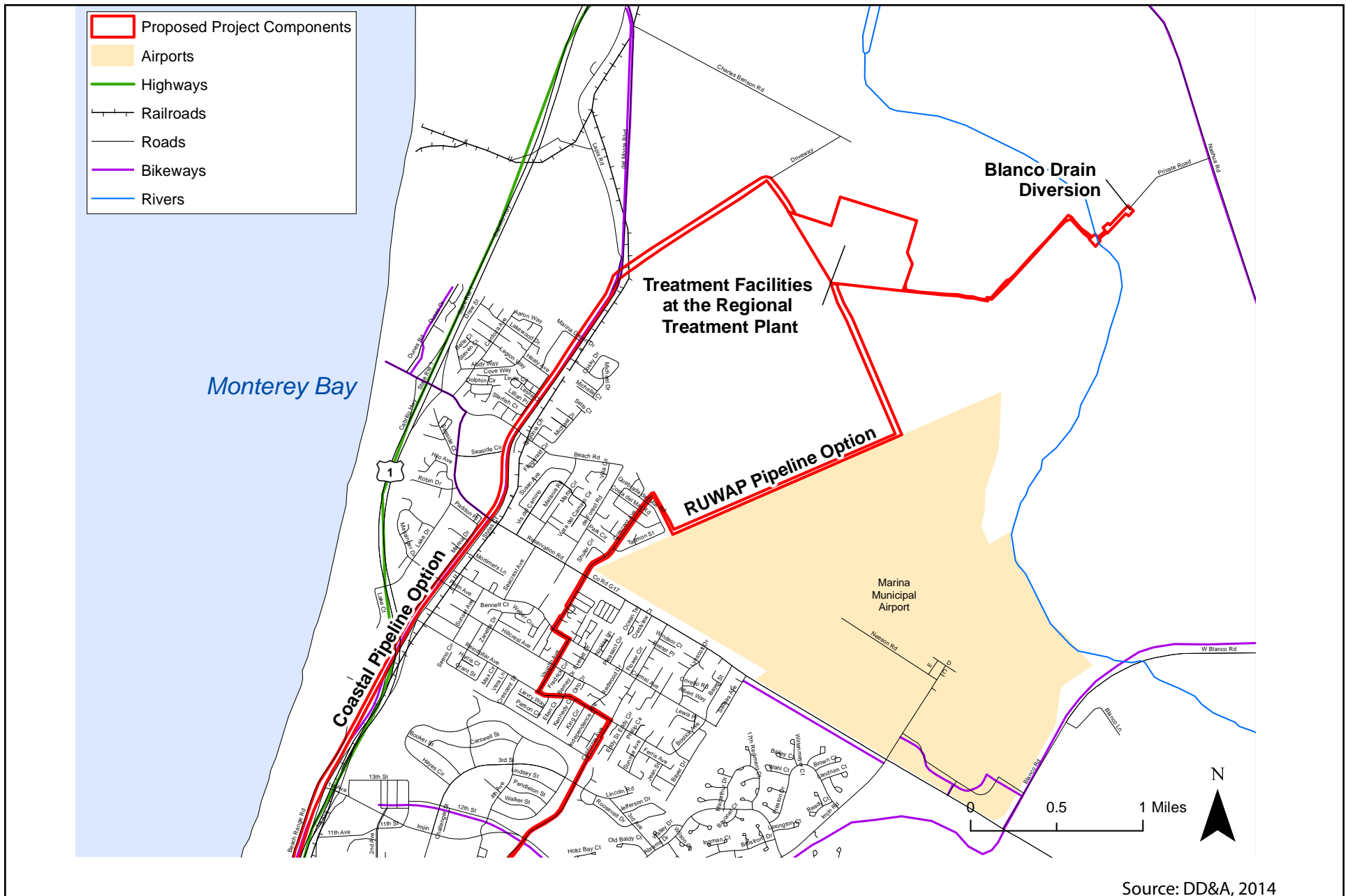
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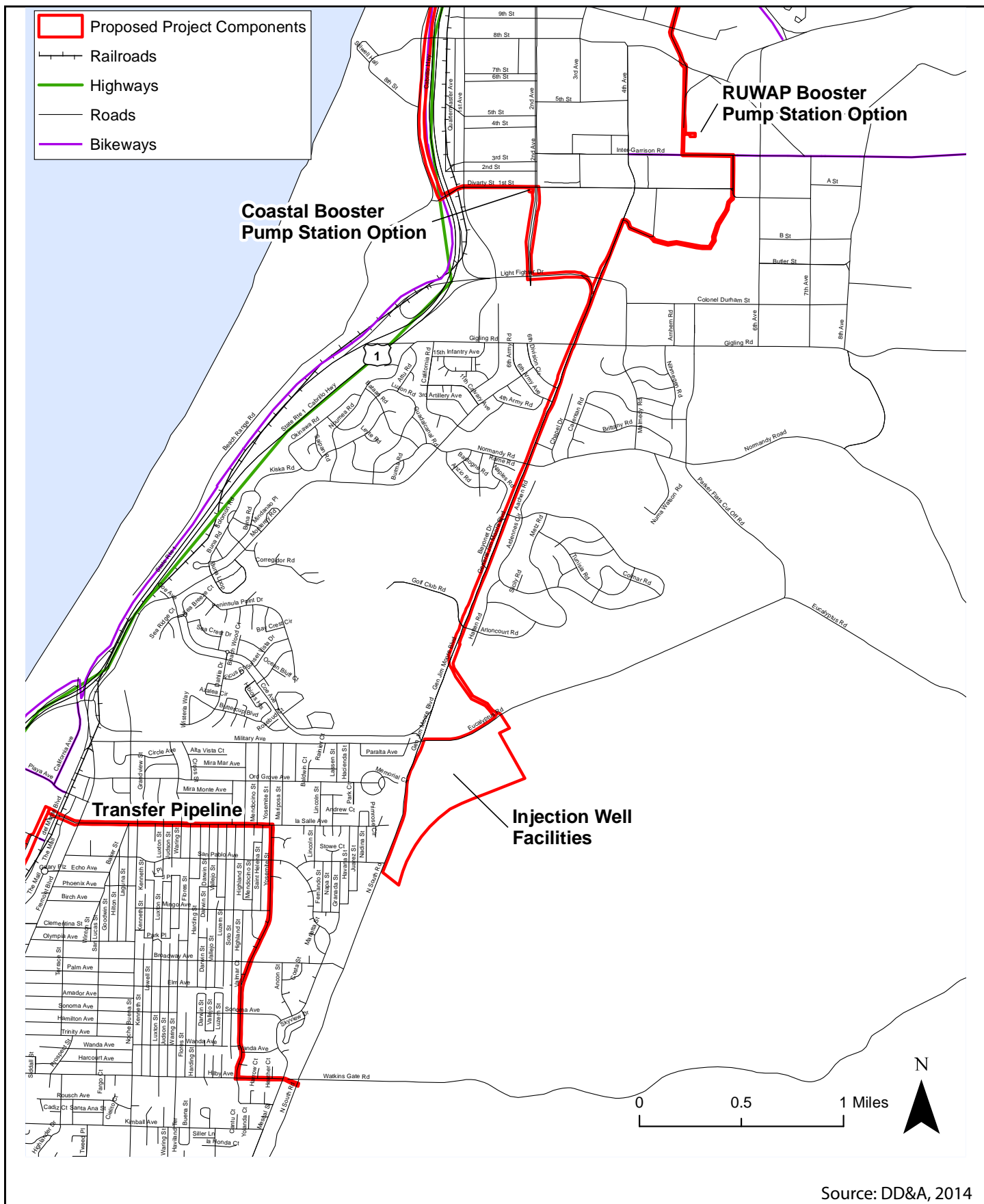


# Marina Transportation Network

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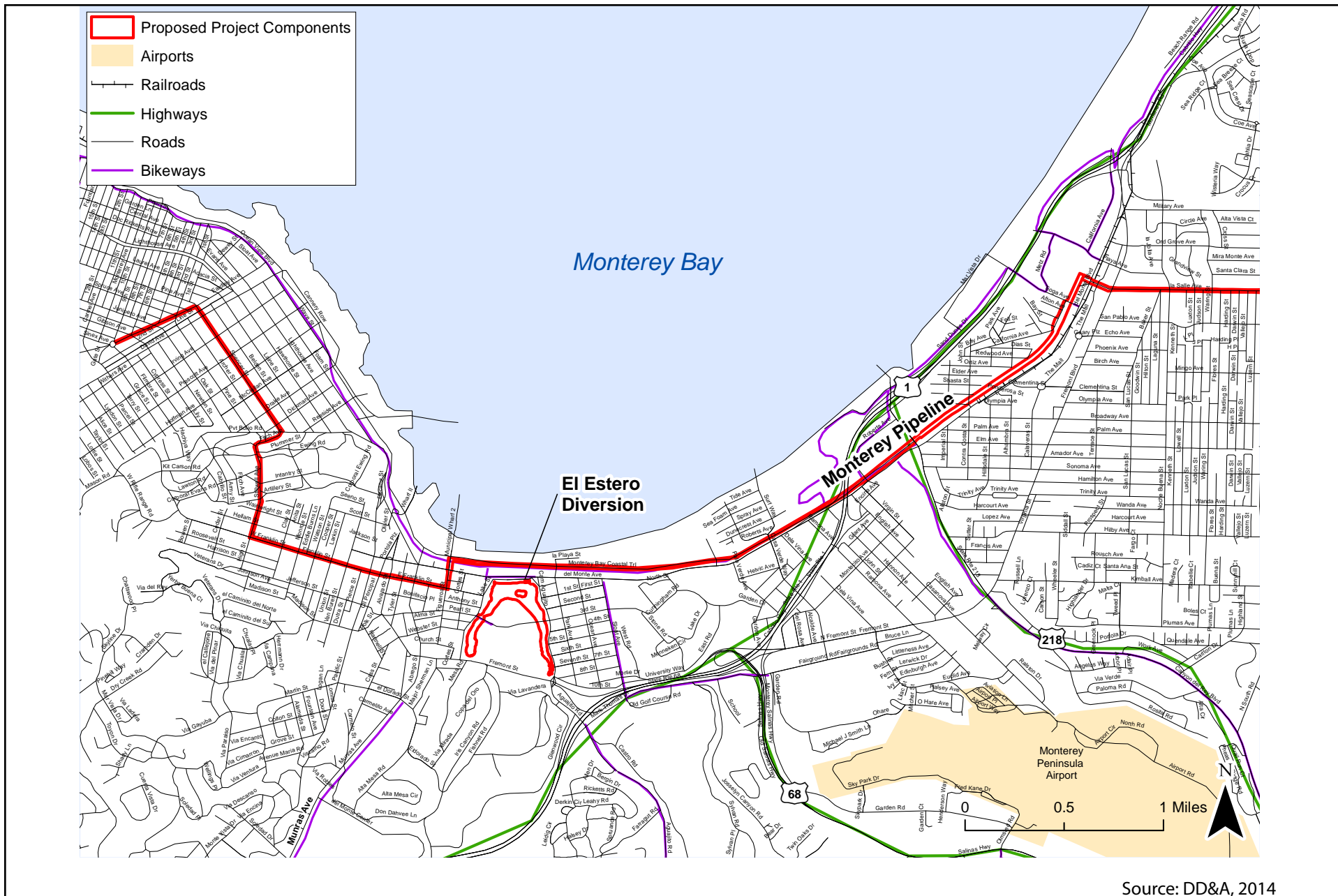


# Seaside Transportation Network

April 2015

Pure Water Monterey GWR Project  
Draft EIR

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# Monterey Transportation Network

April 2015

Pure Water Monterey GWR Project  
Draft EIR

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