3.20 TRANSPORTATION AND TRAFFIC

This section addresses increased vehicular traffic during construction, operations, and maintenance from the transport of people, equipment, and materials to and from the Species Conservation Habitat (SCH) Project sites. It also considers the potential for the Project to cause conflicts with other uses, such as farm equipment, and affect emergency access. The potential for bird airstrikes, which could affect air traffic, is addressed in Section 3.10, Hazards and Hazardous Materials.

The study area for transportation and traffic focuses on the roads that would be used to access the Project sites. Regional access to the Project area is provided by Interstates (I-) 8 and 10 and State Highways (State Routes [SR-]) 78, 86, and 111, as shown in Figure 3.20-1, Regional Circulation System.

Table 3.20-1 summarizes the impacts of the six SCH Project alternatives on traffic and transportation compared to both the existing conditions and the No Action Alternative.

Table 3.20-1 Summary of Impacts on Transportation and Traffic

Impact	Basis of Comparison	Project Alternative						Mitigation Measures
		1	2	3	4	5	6	
Impact TRAN-1: The SCH Project would increase traffic during construction and operations, but would not reduce the level of service of any roadways below the County of Imperial's standard (LOS C).	Existing Condition	L	L	L	L	L	L	None required
	No Action	L	L	L	L	L	L	None required
Impact TRAN-2: Construction/maintenance equipment and tractor trailers could be present in areas used by farm equipment, but would not pose a substantial safety hazard.	Existing Condition	L	L	L	L	L	L	None required
	No Action	L	L	L	L	L	L	None required
Impact TRAN-3: Emergency vehicles would retain their ability to access the Project area during construction and operations despite increased traffic and construction near roadways.	Existing Condition	L	L	L	L	L	L	None required
	No Action	L	L	L	L	L	L	None required

Note:

O = No Impact
L = Less-than-Significant Impact
S = Significant Impact, but Mitigable to Less than Significant
U = Significant Unavoidable Impact
B = Beneficial Impact

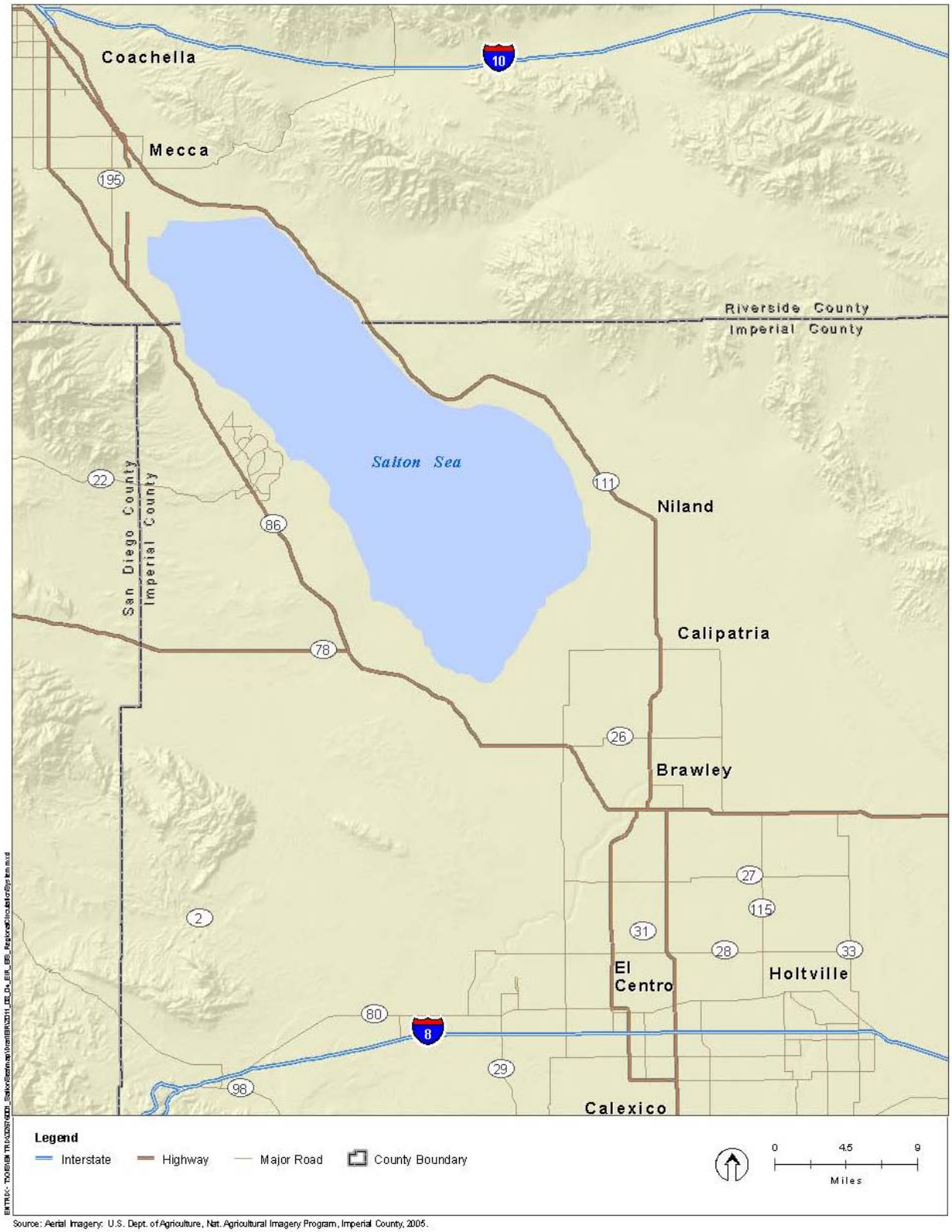

Figure 3.20-1 Regional Circulation System

3.20.1 Regulatory Requirements

The Federal Highway Administration and California Department of Transportation (Caltrans) establish standards and regulations for construction, operations, and maintenance of Federal and state highways, respectively. The Southern California Association of Governments and Imperial Valley Association of Governments provide regional transportation planning in the Imperial Valley, and incorporated cities provide transportation planning services for their jurisdictions.

The Circulation and Scenic Highways Element of the Imperial County General Plan (County of Imperial 2008) contains information regarding the transportation needs of the county and the various modes available to meet those needs. The Circulation Element includes information needed to coordinate regional transportation and provide for a circulation system that enables the movement of goods and people, including pedestrians, bicycles, transit, train, air, and automobile traffic flows within and through the county. Transportation resources in the county are administered by the Department of Public Works. The Circulation Element intends to guide future circulation plans such that all roads and streets will operate at Level of Service (LOS) C or better (County of Imperial 2008). Level of service is a qualitative description of a facility's performance based on average delay per vehicle, vehicle density, or volume-to-capacity ratios. Level of service ranges from LOS A, which indicates free-flow or excellent conditions with short delays, to LOS F, which indicates congested or overloaded conditions with extremely long delays.

The definitions presented in Table 3.20-2 are used in Imperial County. In addition, LOS classifications generally consider width of paved and unpaved rights-of-way, changes in speeds to accommodate cross walks and municipal speed zones (such as in Imperial County when SR-86 crosses both municipal and agricultural areas), percentage of vehicles that are trucks versus cars or agricultural vehicles (especially if no parallel routes are available), accidents per million vehicle miles on the route, and travel time and velocity. Level of service can be different along adjacent portions of a route; it can decrease to reflect additional traffic entering the roadway or increase if the roadway is widened or speed limit is increased in the adjacent portion of the route.

Table 3.20-2 Level of Service Definitions

Level of Service	Description
A	Free flow, with users unaffected by others on the roadway.
B	Stable flow, but the presence of others in the traffic stream becomes noticeable.
C	Stable flow, but users become affected by others in the traffic stream.
D	High-density but stable flow; speed and freedom of movement are severely restricted; poor level of comfort and convenience.
E	High-density, with traffic demand usually at capacity, resulting in long traffic delays.
F	Forced or breakdown flow, with traffic demand exceeding capacity; unstable stop-and-go traffic.

Source: Transportation Research Board 2000

Roads and highways within Imperial County are grouped into the following classes or systems according to the type of service they are intended to provide:

- **Expressways** provide regional and intracounty travel services with six travel lanes.
- **Prime arterials** provide regional, subregional, and intracounty travel services with four to six travel lanes.

- **Minor arterials** provide intracounty and subregional services with four to six travel lanes.
- **Major collectors (collectors)** are designed for intracounty travel as a link between the long-haul facilities and the collector/local facilities.
- **Minor local collectors (local collectors)** are designed to connect local streets with the adjacent collectors or the arterial street system with two travel lanes.
- **Residential streets** include residential cul-de-sac and loop streets and are designed to provide direct access to abutting properties and to give access from neighborhoods to the collector street system.

Table 3.20-3 describes the relationship between level of service and average daily vehicles trips on each type of roadway.

Table 3.20-3 Imperial County Standard Street Classification and Average Daily Vehicle Trips

Road	Level of Service (LOS)				
Class	A	B	C	D	E
Expressway	30,000	42,000	60,000	70,000	80,000
Prime Arterial	22,200	37,000	44,600	50,000	57,000
Minor Arterial	14,800	24,700	29,600	33,400	37,000
Major Collector (Collector)	13,700	22,800	27,400	30,800	34,200
Minor Collector (Local Collector)	1,900	4,100	7,100	10,900	16,200
Local County (Residential)	*	*	<1,500	*	*
Local County (Residential Cul-de-Sac or Loop Street)	*	*	<200	*	*

Source: County of Imperial 2008

Note:

* Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

The County of Imperial Bicycle Master Plan (BMP) was prepared in September 2003. The BMP provides a comprehensive overview of existing bicycle routes as well as detailed plans for an improved bicycle network. Thirteen routes are proposed to improve bicycle connectivity throughout the county. Proposed Route 7 would provide access to the Salton Sea at the Sonny Bono Salton Sea National Wildlife Refuge headquarters, located at the corner of Gentry and Sinclair roads (see Figure 3.20-2). Route 7 is proposed to be constructed as a Class II route, which is a marked lane exclusively for bicycle use (County of Imperial 2003). At this time, however, no timeline exists for the implementation of the BMP, and Imperial County does not foresee any of the routes being constructed in the near future (personal communication, C. Rowin 2010).

3.20.2 Affected Environment

The vehicular transportation network in the Imperial Valley consists of freeways, highways, local roads, and rural roads. The transportation network in Imperial County is considered critical to the regional economy due to the movement of agricultural goods and services and recreational travel. The following sections describe the primary regional roadways that would be used by the SCH Project – I-8 and I-10, and SR-78, SR-86, and SR-111 – along with their traffic volumes and levels of service.

3.20.2.1 Roadways

Routes that provide regional transportation connections are described below (County of Imperial 2008):

- **I-10**, located to the north of the Salton Sea, extends in a west to east direction and provides access from the Los Angeles/Inland Empire Region to the west and Arizona to the east. I-10 is the southernmost east-west, coast-to-coast interstate highway in the United States.
- **I-8** is the primary east-west route through Imperial County between San Diego, California, and Yuma, Arizona. Providing two travel lanes in each direction, I-8 has complete grade separations at all intersections. In the Project area, I-8's main functions are to serve as an interregional route for people and goods movement, provide connection to other states, and provide access to desert recreational activities.
- **SR-86** is located to the west of the Salton Sea and extends in a north to south direction from I-10 near Indio to I-8 near El Centro. The highway begins as a four-lane expressway in Riverside County and ends as a 2-lane conventional highway at I-8. The 67.8-mile-long route primarily provides travel for interregional, intraregional, and international trips. SR-86, north of SR-78, is a major goods movement corridor serving the Los Angeles area and other California goods movement centers from the Imperial County region. During the spring, truck traffic transporting agricultural goods constitutes 35 percent of travel on this route.
- **SR-78** extends in a west to east direction from San Diego County to SR-86 near the southwestern Salton Sea shoreline. The route generally is a two-lane conventional highway throughout its alignment, although some portions recently have been upgraded to a four-lane expressway and four-lane conventional highway.
- **SR-111** extends in a north to south direction from I-10 near Indio to the United States-Mexico border at Calexico and includes a crossing of I-8 near El Centro. SR-111 is considered to be the "backbone" route of Imperial County as it connects the three largest cities (Calexico, El Centro, and Brawley) and acts as a major goods movement route, particularly for agricultural products and cross-border goods and services.

Portions of the state routes include dual classifications, such as the portion of SR-86 that is concurrent with SR-78 from Brawley to the southwestern Salton Sea shoreline.

Caltrans is currently undergoing construction of a new expressway, the Brawley Bypass. This project will include an 8-mile, four-lane divided expressway from SR-86 north of the city of Brawley to 1.5 miles south of the eastern junction of SR-111 and SR-78. Major features of this project include bridges at the New River and Union Pacific Railroad crossings, an interchange with SR-111, and accommodation for the future Brawley Airport expansion. Access to the expressway will be at about 1-mile intervals at signalized and unsignalized intersections (Caltrans 2010a). Stage 1 of the construction was completed in May 2005, stage 2 was completed in early 2011, and stage 3, which will connect SR-86 to SR-111, began in Spring 2011 and is expected to be completed in Fall 2012. A Traffic Management Plan will be operational for all stages of this project. Because the Project involves constructing a new road and not making improvement to an existing road, traffic impacts are limited. Some smaller roads within cities near SR-111 will be closed intermittently during construction of stage 3 (personal communication, S. Amen 2010).

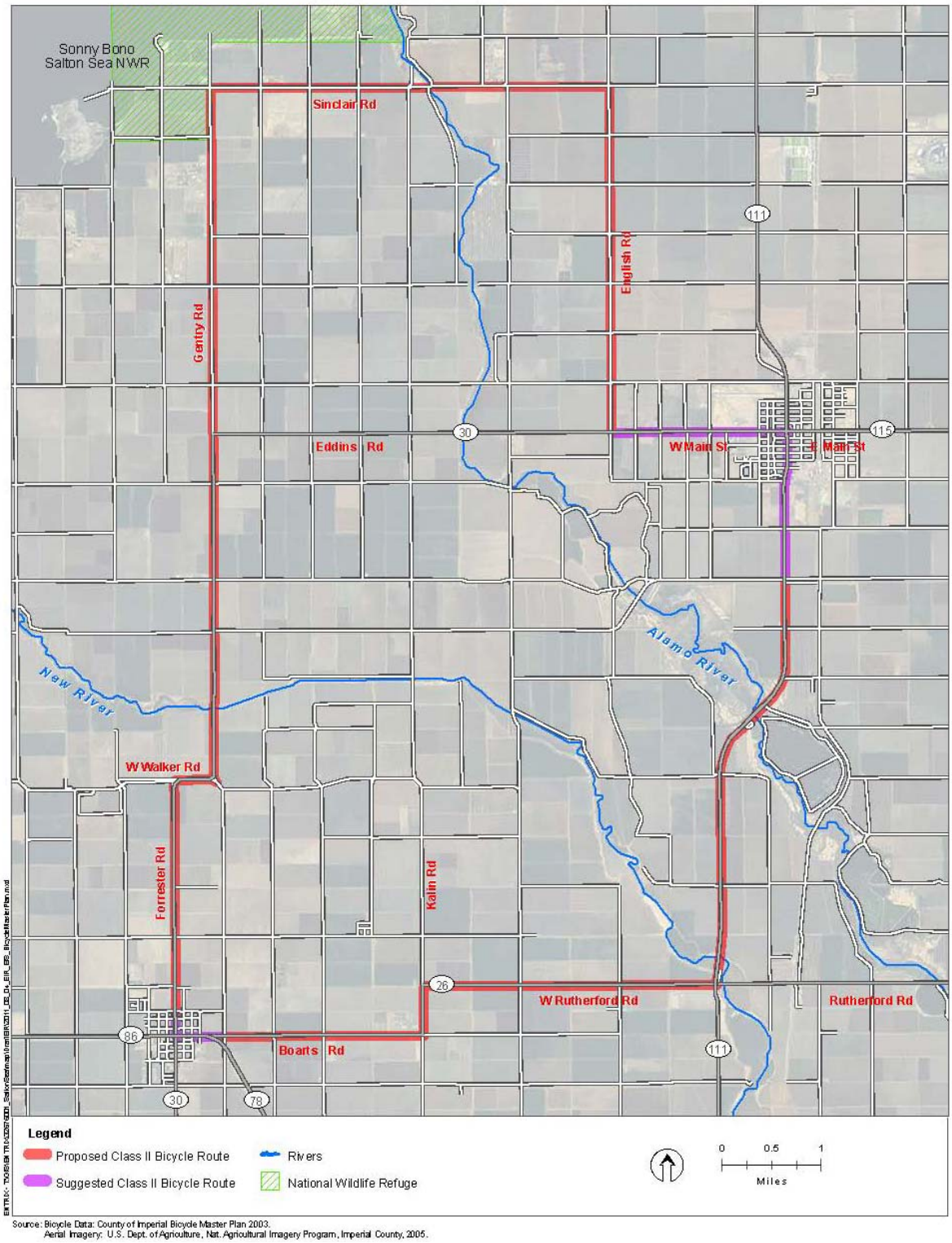

Figure 3.20-2 Proposed Route 7 of the County of Imperial Bicycle Master Plan

3.20.2.2 Traffic Volumes and Level of Service

Recent traffic volumes and levels of service in the study area along I-8 and I-10, and SR-78, SR-86, and SR-111 are shown in Table 3.20-4. Peak-hour traffic and annual average daily traffic (AADT) are based on peak-hour volumes published by Caltrans for the year 2009.

Table 3.20-4 Recent Traffic Volumes and LOS on Key Roadways near the Salton Sea

County	Location	Peak Hour in Peak Direction	AADT in Peak Direction	Classification (# of Lanes)	LOS
Interstate 8					
Imperial	Junction SR-98	1,850	13,800	Expressway (4)	A
Imperial	El Centro, Junction SR-86	4,000	34,500	Expressway (4)	B
Imperial	Junction SR-111	3,050	32,000	Expressway (4)	B
Imperial	Junction SR-115	1,800	12,000	Expressway (4)	A
Imperial	Junction SR-98	2,000	13,800	Expressway (4)	A
Imperial	Junction SR-186	2,900	20,400	Expressway (4)	A
Interstate 10					
Riverside	Indio, Jefferson Street/Indio Boulevard	7,500	83,000	Expressway (4)	E
Riverside	Indio, North Junction SR-111	5,300	57,000	Expressway (6)	C
Riverside	Indio, South Junction SR-86	4,850	52,000	Expressway (4)	C
Riverside	Eagle Mountain Road	3,000	23,000	Expressway (4)	A
Riverside	Junction SR-177	3,000	23,000	Expressway (4)	A
State Route 78					
Imperial	North Junction SR-86	1,700	18,300	Minor Arterial (2)	B
Imperial	Brawley, West Junction SR-111	2,050	23,300	Minor Arterial (4)	B
Imperial	Brawley, East Junction SR-111	770	7,600	Minor Arterial (4)	A
Imperial	West Junction SR-115	820	5,500	Collector (2)	A
Imperial	East Junction SR-115	530	3,400	Collector (2)	A
State Route 86					
Imperial	El Centro, Junction SR-8	2,600	29,000	Minor Arterial (4)	C
Imperial	Imperial, Imperial Avenue	2,550	28,000	Minor Arterial (4)	C
Imperial	Brawley, South Junction SR-78	1,400	16,200	Minor Arterial (4)	B
Imperial	North Junction SR-78	870	10,800	Minor Arterial (4)	A
Imperial	Salton City, South Marina Drive	1,600	13,800	Minor Arterial (4)	A
Imperial	Salton Sea Beach Road (Brawley Avenue)	1,600	13,800	Minor Arterial (4)	A
Imperial	Desert Shores Drive	1,350	13,100	Minor Arterial (4)	A
Riverside	Coachella, Junction SR-111	1,400	13,100	Minor Arterial (4)	A
State Route 111					
Imperial	Calexico, Second Street	2,650	28,500	Prime Arterial (4)	B

Table 3.20-4 Recent Traffic Volumes and LOS on Key Roadways near the Salton Sea

County	Location	Peak Hour in Peak Direction	AADT in Peak Direction	Classification (# of Lanes)	LOS
Imperial	West Junction SR-86 West	2,550	30,000	Prime Arterial (4)	B
Imperial	Junction SR-8	2,500	31,500	Prime Arterial (4)	B
Imperial	Brawley, East Junction SR-78	1,300	14,300	Minor Arterial (2)	A
Imperial	Calipatria, Junction SR-115	930	7,200	Minor Arterial (2)	A
Imperial	Niland, Niland Avenue	530	3,050	Collector (2)	A
Imperial	Bombay Beach Road	220	1,600	Collector (2)	A
Riverside	Salton Sea State Park Road	310	2,500	Collector (2)	A
Riverside	Mecca, West Junction SR-195	500	4,850	Collector (2)	A

Source: Caltrans 2010b; County of Imperial 2008.

The most recent information available for county roadways within the study area is summarized in Table 3.20-5. Figure 3.20-3 shows the roads and traffic counts near the New River sites, and Figure 3.20-4 shows the roads and traffic counts near the Alamo River. Imperial County has not identified the levels of service on these local county roads, but the traffic counts are well below the 1,900 AADT that is characteristic of LOS A.

Table 3.20-5 Traffic Volumes on County Roadways near the Salton Sea

Roadway	Segment	Weekday Volume	Weekend Volume	Year Data Collected
Bannister	SR-86 to Baker	450	225	2000
Brandt	Lindsey to Sinclair	18	no data	2008
Forrester	SR-78 to Bannister	440	365	2004
Forrester	Bannister to Walker	875	630	2007
Gentry	Walker to Vail	965	1360	2008
Gentry	Eddins to Young	1870	no data	2003
Gentry	Lindsey to Sinclair	1220	no data	2003
Sinclair	Gentry to Garst	800	no data	2003
Lack	Bowles to Lindsey	56	no data	2009
Lack	Vail to Walker	485	no data	1994
Walker	Forrester to Lack	173	no data	2000
Walker	Vendel to Lack	no data	no data	N/A
Lack	Walker to SR-78	no data	no data	N/A
Bannister	Baker to Forrester	no data	no data	N/A

Source: Personal communication, D. Mahaney 2010.

Source: Traffic Data: Personal Communication, D. Mahaney 2010.
Aerial Imagery: U.S. Dept. of Agriculture, Nat. Agricultural Imagery Program, Imperial County, 2005.

Figure 3.20-3 Road Network around New River

Source: Traffic Data: Personal Communication, D. Mahaney 2010.
Aerial Imagery: U.S. Dept. of Agriculture, Nat. Agricultural Imagery Program, Imperial County, 2005.

Figure 3.20-4 Road Network around Alamo River

3.20.3 Impacts and Mitigation Measures

3.20.3.1 Impact Analysis Methodology

The impact assessment methodology used to support the transportation and traffic analysis is based on a comparison of the projected construction and operational traffic to the AADT described above, as well as the location of emergency access routes and the proximity of farm equipment.

Traffic generated by the Project would include trips generated by workers commuting from nearby urban centers, campgrounds, or recreational vehicle facilities to the Project site(s) in light vehicles on a daily basis. It is likely that construction workers would carpool due to the remoteness of the Project sites, but it is conservatively assumed that they would drive separately. Given the distance to the nearest restaurants, it is assumed that both construction and operational workers would only generate one round-trip per day between their home and the Project site(s) and would remain on site for lunch. Workers are assumed to work 235 days per year, and construction is projected to last 2 years.

In addition, trips would be generated by the delivery and removal of construction equipment and the transport of construction materials to the Project site(s). Heavy equipment would operate primarily on site and would not travel to and from the Project site(s) on a daily basis. The heaviest concentration of tractor trailer trips would result from the delivery of rock and gravel to the sites, which would last for approximately 2 to 3 months for both the New and Alamo river sites.

It is assumed that both commuters and tractor trailers would likely approach the Project site(s) by travelling along SR-86 or SR-111, both of which run primarily in a north-south direction and connect the primary population centers of Imperial County. Both highways currently operate at LOS C or better, with most segments in the Project vicinity operating at LOS A (refer to Table 3.20-4).

Specific routes that Project vehicles are anticipated to follow once they leave SR-86 or SR-111 will vary according to alternative and, therefore, are discussed below.

3.20.3.2 Thresholds of Significance

Significance Criteria

Impacts would be significant if the SCH Project would:

- Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and nonmotorized 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;

- 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;

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;

- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);

- Result in inadequate emergency access; or

- Conflict with adopted policies regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Application of Significance Criteria

A summary of the methodology used in applying the significance criteria to the Project alternatives follows:

- **Conflict with an applicable plan or congestion management program** – The largest increase in traffic would occur during the construction period. Vehicle use by employees during operations and maintenance would be minimal. Therefore, the analysis is based upon the peak construction period, and it is determined whether the Project would reduce the level of service below LOS C, which is Imperial County's desired standard. No congestion management programs are applicable to the study area.

- **Result in a change in air traffic patterns** – The alternatives would not increase air traffic levels or cause a safety issue that would require a change in the location of flight patterns (refer to Section 3.10, Hazards and Hazardous Materials, for a discussion of potential impacts associated with bird air strikes). Therefore, the analysis in the Environmental Impact Statement/Environmental Impact Report does not evaluate changes in air traffic patterns.

- **Substantially increase hazards due to design features or incompatible use –** The alternatives do not include new roads, nor do they involve the realignment of existing roads. The Project does not include design features that would increase hazards. Use of existing roads would be in accordance with design criteria, and the local roads would be restored to their previous condition once construction is completed, so no long-term road hazards would result from Project implementation. Therefore, the analysis in this Environmental Impact Statement/Environmental Impact Report does not evaluate an increase in hazards due to design features. It does consider incompatibilities with farm equipment, however, given the agricultural nature of the Project area.

- **Result in inadequate emergency access –** The alternatives do not include new roads, nor do they involve the realignment of existing roads. Pipeline construction may occur within existing roadways, however, and would introduce tractor trailers and construction equipment to local roads. Therefore, the following analysis evaluates the potential for impacts from construction within roadways and substantial increases in traffic that may reduce emergency response times.

- **Conflict with policies related to alternative transportation –** Neither construction nor operations would affect alternative transportation. As noted above, the proposed bikepath in the Project vicinity is not planned to be built when SCH construction would be underway. The limited amount of traffic during operations would not be incompatible with the use of the bikepath even if it used the same roadways because the Class II bikepath would be in a marked lane for bicycle use only. Rail traffic would not be affected by the SCH Project because trains would not be required, nor would railroad tracks be affected.

3.20.3.3 No Action Alternative

Under the No Action Alternative, roadways would continue to operate as they do currently. Traffic would increase at normal rates, and the segments of state highways and county roads within the Project vicinity would continue to operate at LOS C or better during the period when Project construction traffic would occur.

3.20.3.4 Alternative 1 – New River, Gravity Diversion + Cascading Ponds

Impact TRAN-1: The SCH Project would increase traffic during construction and operations, but would not reduce the level of service of any roadways below the County of Imperial's standard (LOS C) (less-than-significant impact). Alternative 1 would require approximately 97 workers during construction. Of the 97 workers, 47 would work on site and would include project managers, foremen, equipment operators, and laborers. These on-site workers would generate up to 47 round-trips in personal vehicle trips per day over the 2-year Project construction period. The remaining 50 workers would operate tractor trailers to deliver materials and equipment to the site on a daily basis. It is assumed that delivery of rock and gravel would produce a maximum of 150 tractor trailer round-trips per day (300 trips) for an approximately 2- to 3-month period. Delivery of equipment and materials like pipe to the Project site from more distant locations would require a maximum of 187 round-trips total over the 2-year construction period, which is the equivalent of approximately one long-distance trip every 2.5 days.

Tractor trailers hauling riprap material to the Project site likely would originate on the northwestern side of the Salton Sea. They would travel south on SR-86, exiting at West Bannister Road where they would travel east for approximately 2 miles before heading north on Bruchard Road for about 4 miles. Workers would also likely approach the Project site by SR-86. Project vehicles coming from the north and traveling southbound along SR-86 would follow the same route as tractor trailers, exiting at West Bannister Road, traveling east, and then turning north on Bruchard Road. Vehicles traveling northbound on SR-86 would likely exit the highway at Lack Road, traveling north, turning west on West Bannister Road, and then turning north on Bruchard Road until reaching the Project site.

As discussed above, state highways in the Project vicinity currently operate at LOS A or B. County roads in the Project vicinity operate at an average daily traffic level ranging from 173 trips per day to 485 trips per day on weekdays, which is well below the threshold for LOS A. Therefore, an additional 158 round-trips per day during the 2- to 3-month peak construction period and an average of 8 round-trips per month during the remainder of the 2-year period would not cause the level of service to fall below LOS C, which is the standard for roads in Imperial County. The Project would not substantially conflict with any applicable transportation plans, and impacts would be less than significant when compared to both the existing environmental setting and the No Action Alternative.

Alternative 1 would require two additional habitat management and maintenance personnel for the long-term operation of the SCH ponds. It is anticipated that these two workers would commute from nearby urban centers to the Project site or a nearby facility, generating approximately 2 round-trips a day, 5 days a week. A tractor-trailer would be required approximately 37 days a year for maintenance activities, and heavy equipment would periodically be brought in as well. These trips would have a negligible impact on area roadways, and any impacts would be less than significant when compared to both the existing environmental setting and the No Action Alternative.

Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures are required.

Residual Impact

Not applicable.

Impact TRAN-2: Construction/maintenance equipment and tractor trailers could be present in areas used by farm equipment, but would not pose a substantial safety hazard (less-than-significant impact). Pipeline construction could follow existing roadways or could cross agricultural fields. Construction equipment would be used within designated rights-of-way in either case. Land would be acquired from a willing landowner, who would be aware of the presence of the construction and maintenance vehicles. If construction followed roads, at least one travel lane would remain open at all

times, and appropriate safety measures would be taken, including the use of flaggers and warning signs. As discussed under Impact TRAN-1, the volume of traffic generated during construction would not exceed LOS C, and the presence of slow-moving vehicles would not be incompatible with farm equipment. As noted, flaggers would be used when appropriate to minimize the conflicts between Project tractor trailers and equipment and other vehicles. Operations and maintenance would involve only minor amounts of traffic and equipment use, and appropriate safety precautions would be taken as needed. Any impacts would be less than significant when compared to both the existing environmental setting and the No Action Alternative.

Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures are required.

Residual Impact

Not applicable.

Impact TRAN-3: Emergency vehicles would retain their ability to access the Project area during construction and operations despite increased traffic and construction near roadways (less-than-significant impact). As discussed under Impact TRAN-1, neither construction nor operations would result in an unacceptable level of service on any roadways, and the amount of traffic that would be generated on the generally lightly traveled local roadways would not delay emergency access. A potential exists for pipeline installation to occur along existing roadways, but typical roadway safety precautions would be taken (e.g., flaggers, signs warning motorists of roadway work), and at least one travel lane would remain open at all times, thereby ensuring that emergency vehicles could pass. Finally, because emergency vehicles are equipped with sirens, which give advance warning of their approach, construction crews would have the ability to make emergency provisions for safe vehicle passage through construction zones. Impacts, therefore, would be less than significant when compared to both the existing environmental setting and the No Action Alternative.

Mitigation Measures

Impacts would be less than significant; therefore, no mitigation measures are required.

Residual Impact

Not applicable.

3.20.3.5 Alternative 2 – New River, Pumped Diversion

Impact TRAN-1: The SCH Project would increase traffic during construction and operations, but would not reduce the level of service of any roadways below the County of Imperial's standard (LOS C) (less-than-significant impact). The discussion under Alternative 1 is applicable to this alternative, although less traffic would be generated during construction because fewer tractor trailer trips and construction workers would be required. Thirty-seven on-site construction workers would be required, generating up to 37 round-trips per day, and a maximum of approximately 120 round-trips would be generated by tractor trailers hauling rock over an approximately 2- to 3-month period. Delivery of equipment and materials like pipe to the Project site from more distant locations would require a maximum of 126 round-trips (252 trips) total over the 2 year construction period, which is the equivalent of approximately one long-distance trip every 3.7 days.

Impact TRAN-2: Construction/maintenance equipment and tractor trailers could be present in areas used by farm equipment, but would not pose a substantial safety hazard (less-than-significant impact). This impact is applicable to Alternative 2, although a pipeline would not be constructed; thus,

even less of a potential exists for conflict because construction would not occur across farmers' fields or along roads used by farm equipment.

Impact TRAN-3: Emergency vehicles would retain their ability to access the Project area during construction and operations despite increased traffic and construction near roadways (less-than-significant impact). The discussion under Alternative 1 is applicable to this alternative, although a pipeline would not be constructed; thus, even less of a potential exists for construction-related conflicts along roadways.

3.20.3.6 Alternative 3 – New River, Pumped Diversion + Cascading Ponds

Impact TRAN-1: The SCH Project would increase traffic during construction and operations, but would not reduce the level of service of any roadways below the County of Imperial's standard (LOS C) (less-than-significant impact). The discussion under Alternative 1 is applicable to this alternative, although more traffic would be generated during construction because more tractor trailer trips and construction workers would be required. Fifty-five on-site construction workers would be required, generating up to 55 round-trips per day, and a maximum of approximately 180 round-trips would be generated by tractor trailers hauling rock over an approximately 2- to 3-month period. Delivery of equipment and materials like pipe to the Project site from more distant locations would require a maximum of 153 round-trips total over the 2-year construction period, which is the equivalent of approximately one long-distance trip every 3 days.

Impact TRAN-2: Construction/maintenance equipment and tractor trailers could be present in areas used by farm equipment, but would not pose a substantial safety hazard (less-than-significant impact). The discussion under Alternative 1 is applicable to this alternative, although a pipeline would not be constructed; thus, even less of a potential exists for conflict because construction would not occur across farmers' fields or along roads used by farm equipment.

Impact TRAN-3: Emergency vehicles would retain their ability to access the Project area during construction and operations despite increased traffic and construction near roadways (less-than-significant impact). The discussion under Alternative 1 is applicable to this alternative, although a pipeline would not be constructed; thus, even less of a potential exists for conflict because construction would not occur across farmers' fields or along roads used by farm equipment.

3.20.3.7 Alternative 4 – Alamo River, Gravity Diversion + Cascading Pond

Impact TRAN-1: The SCH Project would increase traffic during construction and operations, but would not reduce the level of service of any roadways below the County of Imperial's standard (LOS C) (less-than-significant impact). The discussion under Alternative 1 is applicable to this alternative, although less traffic would be generated during construction because fewer tractor trailer trips and construction workers would be required. Twenty-seven on-site construction workers would be required, generating up to 27 round-trips per day, and a maximum of approximately 60 round-trips would be generated by tractor trailers hauling rock over an approximately 2- to 3-month period. Delivery of equipment and materials like pipe to the Project site from more distant locations would require a maximum of 161 round-trips total over the 2-year construction period, which is the equivalent of approximately one long-distance trip every 2.9 days.

Impact TRAN-2: Construction/maintenance equipment and tractor trailers could be present in areas used by farm equipment, but would not pose a substantial safety hazard (less-than-significant impact). The discussion under Alternative 1 is applicable to this alternative.

Impact TRAN-3: Emergency vehicles would retain their ability to access the Project area during construction and operations despite increased traffic and construction near roadways (less-than-significant impact). The discussion under Alternative 1 is applicable to this alternative.

3.20.3.8 Alternative 5 – Alamo River, Pumped Diversion

Impact TRAN-1: The SCH Project would increase traffic during construction and operations, but would not reduce the level of service of any roadways below the County of Imperial's standard (LOS C) (less-than-significant impact). The discussion under Alternative 1 is applicable to this alternative, although less traffic would be generated during construction because fewer tractor trailer trips and construction workers would be required. Twenty-five on-site construction workers would be required, generating up to 25 round-trips per day, and a maximum of approximately 54 round-trips would be generated by tractor trailers hauling rock over an approximately 2- to 3-month period. Delivery of equipment and materials like pipe to the Project site from more distant locations would require a maximum of 96 round-trips total over the 2-year construction period, which is the equivalent of approximately one long-distance trip every 4.9 days.

Impact TRAN-2: Construction/maintenance equipment and tractor trailers could be present in areas used by farm equipment, but would not pose a substantial safety hazard (less-than-significant impact). The discussion under Alternative 1 is applicable to this alternative, although a pipeline would not be constructed; thus, even less of a potential exists for conflict because construction would not occur across farmers' fields or along roads used by farm equipment.

Impact TRAN-3: Emergency vehicles would retain their ability to access the Project area during construction and operations despite increased traffic and construction near roadways (less-than-significant impact). The discussion under Alternative 1 is applicable to this alternative, although a pipeline would not be constructed; thus, even less of a potential exists for conflict because construction would not occur across farmers' fields or along roads used by farm equipment.

3.20.3.9 Alternative 6 – Alamo River, Pumped Diversion + Cascading Ponds

Impact TRAN-1: The SCH Project would increase traffic during construction and operations, but would not reduce the level of service of any roadways below the County of Imperial's standard (LOS C) (less-than-significant impact). The discussion under Alternative 1 is applicable to this alternative, although less traffic would be generated during construction because fewer tractor trailer trips and construction workers would be required. Thirty-four on-site construction workers would be required, generating up to 34 round-trips per day, and a maximum of approximately 72 round-trips would be generated by tractor trailers hauling rock over an approximately 2- to 3-month period. Delivery of equipment and materials like pipe to the Project site from more distant locations would require a maximum of 124 round-trips total over the 2-year construction period, which is the equivalent of approximately one long-distance trip every 3.8 days.

Impact TRAN-2: Construction/maintenance equipment and tractor trailers could be present in areas used by farm equipment, but would not pose a substantial safety hazard (less-than-significant impact). The discussion under Alternative 1 is applicable to this alternative, although a pipeline would not be constructed; thus, even less of a potential exists for conflict because construction would not occur across farmers' fields or along roads used by farm equipment.

Impact TRAN-3: Emergency vehicles would retain their ability to access the Project area during construction and operations despite increased traffic and construction near roadways (less-than-significant impact). The discussion under Alternative 1 is applicable to this alternative, although a pipeline would not be constructed; thus, even less of a potential exists for construction-related conflicts along roadways.

3.20.4 References

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3.20.5 Personal Communications

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