

# Chapter 10

## Transportation and Circulation

### 10.1 Environmental Setting

#### 10.1.1 Introduction and Sources of Information

This chapter describes the transportation and circulation setting in the project area. It includes regulatory, regional, and project settings to provide a context for analyzing the effects of the project.

Information about the local roadway network is based on information from California State Automobile Association and USGS topographical maps. Existing highway conditions were obtained from Caltrans traffic data. Napa River conditions were compiled using data from the Corps' Napa River Maintenance Dredging Project. Information regarding the Napa County Airport and its operations was obtained from the Napa County Airport website (<http://www.co.napa.ca.us/internet/content/departments/airport/>). Also used for reference were *Stanly Ranch Specific Plan Draft EIR* (Brady/LSA, August 1998) and *Los Carneros Recycled Water Irrigation Pipeline Initial Study/Negative Declaration* (Napa Sanitation District, January 11, 1995).

#### 10.1.2 Regulatory Setting

##### 10.1.2.1 California Department of Transportation Encroachment Permit

Caltrans is responsible for planning, designing, constructing, operating, and maintaining state-owned roadways. Caltrans issues permits for projects affecting the ROWs of state-owned roadways and for encroachment on land within its jurisdiction to

- ensure that the proposed encroachment is compatible with the primary uses of the state highway system,
- ensure the safety of both the permittee and the highway user, and
- protect the state's investment in the highway facility.

Actions proposed within, under, or over a state highway ROW—such as rerouting and protecting infrastructure; opening or excavating a state highway for any purpose; constructing and maintaining road approaches or connections to an ROW; grading within the ROW on any state highway; or placing, changing, or renewing an encroachment—require an encroachment permit. An encroachment requiring permanent access or maintenance within a freeway or expressway ROW can be considered for a permit only if the following restrictions are met.

- The encroachment is related to a public facility or to a utility dedicated to public use.
- Alternative locations for the encroachment are inordinately difficult or unreasonably costly.
- The encroachment is as near as possible to the outer boundary of the ROW.
- The encroachment is approved by the Chief of the Caltrans Office of Project Planning and Design and possibly also by the Federal Highway Administration when federal facilities or funds are affected.

### 10.1.2.2 Level of Service Ratings

Caltrans has developed a level of service (LOS) grading system that compares the capacity of a roadway section to the traffic volumes that use that section. There are six LOS grades, A–F, which indicate traffic efficiency at peak-hour traffic periods. For example, a “B” rating would indicate that the roadway supports stable flow conditions and that driving speeds may be slightly restricted during peak traffic. A “D” rating indicates low speeds, forced flow conditions, and major delays at signals (Table 10-1).

~~The Napa County General Plan encourages the use of the Napa River and its tributaries for industry and recreation.~~

**Table 10-1.** Level of Service Definitions

Level of Service Rating	Definition
A	Free flow; insignificant delays.
B	Stable operations; minimal delays.
C	Stable operations; acceptable delays.
D	Approaching unstable; queues develop rapidly but no excessive delays.
E	Unstable flow; significant delays.
F	Forced flow; low operating speeds.

### 10.1.3 Regional Setting

The Napa River Unit is located at the north end of San Pablo Bay, which is part of the Bay-Delta estuary. Interstate 80 (I-80) and SRs 37, 29, 12, and 121

provide regional access to the north bay region. I-80 is a principal southwest-northeast freeway that connects SR 37 to the Bay Area in the southwest and to Fairfield in the northeast. SR 37 parallels the site and runs from east to west, connecting I-80, U.S. 101, SR 29, and SR 121 to the project site. SR 37 provides access to the project site. SR 29 in Vallejo extends north into Napa County from I-80. SR 12 parallels the project site to the north and extends to the west from SR 29, and provides access to the project site from the north.

Several railroad lines are located in the north bay region, including lines that generally parallel portions of U.S. 101, SR 37, and SR 121. See Figure 10-1 for general locations and alignments of the subject roadways and railroad lines.

## 10.1.4 Project Setting

The project-area transportation network consists of SR 37, four light-duty access roads, two perimeter dirt roads, and the Napa River.

### 10.1.4.1 Existing Roadway Network

SR 37 provides the primary access to the levee bordering Ponds 1 and ~~1A~~<sup>near Pond 2</sup> in the south. Duhig Road connects the project site to SR 12/121 to the north. Milton and Buchli Station Roads also provide access to Ponds 7, 7A, and 8 at the north edge of the project site. These two roads are lightly traveled and are used primarily by agricultural vehicles and local residents. There are no public roads within the project site except Milton Road, which extends down Edgerley Island adjacent to Pond 8 and at the north end of the project area.

Caltrans's Office of Traffic Data maintains records of the annual average daily traffic level for SR 37 and SR 12/121. Peak-hour traffic is one criterion that determines the LOS. The peak-hour traffic flow for the section immediately adjacent to the project site along SR 37 is 2,816 vehicles, and along SR 12/121 at Duhig Road, 2,750.

Based on current service conditions, Caltrans has assigned an LOS grade of B to the section of SR 37 immediately adjacent to the project area. Traffic volumes increase as the highway continues east into Vallejo; the LOS is D for various sections of the highway there. There are no LOS grades for surface roads.

For the Water Delivery Option, the project area encompasses Green Island Road, which provides access to the former salt evaporator area from the adjacent UPRR line (to the northeast). This road currently experiences very little traffic, as it is not a through street and terminates at the former Cargill Salt facility adjacent to, and east of, the Napa River. Stanly Lane is also not a through street and is lightly traveled by local residents. Additionally, the project area includes Buchli Station Road, described above.

### 10.1.4.2 Navigation (Recreation and Industrial)

The Napa River provides water access to the project area, connecting the project site to San Pablo Bay in the south and Napa in the north. The Napa River navigation channel is approximately 1,000 feet wide and 15 feet deep. Several sloughs extend from the Napa River to the west. From south to north, the sloughs are Dutchman Slough, South Slough, China Slough, and Napa Slough. Depending on the tides, each of these sloughs can provide access to various locations in the project site. The Napa River supports navigation of pleasure craft, tugboats, and barges. The Napa County General Plan encourages the use of the Napa River and its tributaries for industry and recreation.

The Petaluma River, which extends from the north side of the city of Petaluma to San Pablo Bay within the project area, is used for recreational and industrial navigational purposes similar to those for the Napa River system.

### 10.1.4.3 Railroad

Two railroad lines are located within the study area of the pipelines currently proposed for the Water Delivery Option.

- One railroad line, owned by NWPRRA, traverses the Sonoma Pipeline study area and generally extends in an east-west direction from SR 12/121 to, and past, the Napa River. This segment of railroad line has not been used for several years because the previous freight operator went out of business; however, NWPRRA expects that a new freight operator will take over operation of the subject line.
- The other railroad line, owned and operated by California Northern Railroad and currently in service, extends in a northwest-southeast direction east of the Napa and CAC Pipeline study areas. This line is part of a major north-south rail transportation system.

Figure 10-1 shows the locations of the two railroad lines that extend through the local study area for the Water Delivery Option.

## 10.2 Environmental Impacts and Mitigation Measures

### 10.2.1 Methodology and Significance Criteria

Impacts on traffic were analyzed quantitatively by

- comparing existing LOS data with potential traffic increases resulting from the proposed project,



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**Figure 10-1**  
**Highway and Railroad Lines Near the**  
**Project and Program Pipeline Alignments**

- calculating the total number of daily trips generated during the construction phase, and
- estimating equipment needed during project construction.

Criteria based on the State CEQA Guidelines were used to determine the significance of transportation and traffic-related impacts. The project would have a significant impact on transportation and traffic if it would

- cause an increase in traffic that is substantial in relation to existing traffic load and capacity of the street system;
- cause, either individually or cumulatively, exceedance of an LOS standard established by the state congestion management agency; or
- substantially increase traffic or navigation hazards because of a design feature.

## 10.2.2 No-Project Alternative

### 10.2.2.1 Impact T-1: Temporary Increase in Traffic Volumes as a Result of Emergency Repairs

Limited levee reconstruction would occur in the event of a failure or catastrophic breach of the levees. The timing and duration of these reconstruction activities are unknown because they would depend on the extent of levee damage and the need for emergency repairs. However, emergency levee repairs could be expected to generate a temporary increase in traffic because of the vehicles and equipment needed for such repairs. Traffic volumes on the primary routes to the site are already high; these temporary increases would not substantially increase the traffic load on either SR 37 or SR 12/121. Therefore, this impact is considered less than significant. Because this alternative would result in no project being implemented, and because this impact is less than significant, No mitigation is required.

## 10.2.3 Salinity Reduction Option 1A: Napa River and Napa Slough Discharge

### 10.2.3.1 Impact T-2: Temporary Increase in Traffic Volumes as a Result of Project Construction

The ~~terrestrially~~ land-accessible ponds requiring maintenance are Ponds 1A, 7, 7A, and 8. Levee and ~~other~~ reconstruction activities at Pond 1A would require approximately 5 daily truckloads, and Ponds 7 and 7A would require multiple (approximately 20) daily truckloads during the related construction period. Pond 8 would require minor repair or replacement of water control

structures. SR 37 provides access to Pond 1A. Milton Road is a surface road at the north end of the project that would provide immediate project-site access to Ponds 7, 7A, and 8. Most other construction areas would be accessed via the Napa River and the network of sloughs throughout the project area. Pond 1A repairs would likely be accomplished by transporting materials overland then by barge to the work area. Table 10-2 lists the vehicles needed for construction and the purposes of these vehicles.

Project construction is not expected to substantially increase the existing traffic level on SR 37 or SR 12/121. Construction activities at Pond 1A are expected to result in approximately 5 daily loads of traffic on SR 37. Construction activities at Ponds 7, 7A, and 8 are expected to result in an addition of approximately 20 daily loads of traffic at the intersection of Milton Road and SR 12/121. These numbers are not considered large enough to increase volume and decrease level of service. Traffic levels on these roads have sufficient capacity to handle this small increase. In addition, construction-related impacts would be temporary and limited to delivery of materials for levee repair and/or canal maintenance. Therefore, this impact is considered less than significant. No mitigation is required.

### **10.2.3.2 Impact T-3: Increase in Construction-Related Traffic Hazards**

Construction-related activities would not substantially increase traffic hazards on local or regional roadways. Construction activities would be removed from traffic flow, would not require alteration to fit current traffic patterns, and would require limited off-site transport of materials; therefore, no increase in construction-related traffic hazards is anticipated. This impact is considered less than significant. No mitigation is required. If necessary, proper safety signage would be used to warn motorists of potential hazards.

### **10.2.3.3 Impact T-4: Increase in Watercraft Traffic in the Napa River**

Diesel-powered barges and small boats would be used to access construction areas within the project site that are not terrestrially accessible. The Napa River would provide a navigation route for barges and small boats that would transport construction equipment and construction workers from an off-site staging area to the construction sites in the project area. Barges would make several daily trips transporting construction equipment between the staging area and internal construction sites. Small boats would be used as needed by construction crew traveling between staging areas and construction sites that are not accessible terrestrially. With the possible exceptions of Ponds 1, 1A, 7, 7A, and 8, all levee reconstruction material would be dredged from the pond and placed on the existing levee. It would also be necessary to transport equipment to levee breach locations on a barge. Barges with shallow drafts would be needed because of the

shallow depth of the Napa River adjacent to the levees; many deliveries would occur during high tide to minimize the possibility of the barge becoming trapped in the mud. Table 10-2 describes the type and number of each piece of equipment associated with levee repair and breaching. Construction equipment would operate from atop the levees to repair and breach in locations identified on the project map (Figure 10-1) and would use existing borrow ditch material. Daily watercraft trip levels in the Napa River are not monitored by a government agency; watercraft use associated with this option probably would not greatly affect the number of watercraft using the river. Therefore, this impact is considered less than significant. No mitigation is required.

**Table 10-2.** Projected Construction Vehicles and Other Resources Necessary for Levee Improvements

Vehicle or Resource (number projected)	Purpose	Comments
Long-reach excavator (1–2)	Move dredged materials within the project site	Excavator(s) would remain at the project site until construction phase is complete
Diesel-powered barges (2–3)	Transport construction equipment from an off-site staging area to the construction sites within the project area	The number of daily trips is approximately 2
Small to medium bulldozers (1–2)	Repair and construct levees	Bulldozers would remain at the project site until construction phase is complete
Land-based dump trucks (5–6)	Transport levee material to/from terrestrially accessible levees	The number of daily trips is approximately 2
Small clamshell dredge (1)	Collect dredge material to reinforce existing levees	Dredge would remain at project site until construction phase is complete
Sheetpile driver (1)	Drive sheetpiles into Bay Mud during construction dewatering	Sheetpile driver would remain at the project site until construction phase is complete
Small boats (1–2)	Transport construction workers from an off-site staging area to the construction sites within the project area	The number of daily trips is approximately 8

## 10.2.4 Salinity Reduction Option 1B: Napa River and Napa Slough Discharge and Breach of Pond 3

Impacts under Salinity Reduction Option 1B (Impacts T-2, T-3, and T-4) are nearly the same as those under Salinity Reduction Option 1A except that fewer trips would be required because less construction would occur on Pond 3.



## **10.2.5 Salinity Reduction Option 1C: Napa River and Napa Slough Discharge with Breaches of Ponds 3 and 4/5**

Impacts under Salinity Reduction Option 1C (Impacts T-2, T-3, and T-4) are nearly the same as those under Salinity Reduction Option 1A except that fewer trips would be required because less construction would occur on Ponds 3, 4, and 5.

## **10.2.6 Salinity Reduction Option 2: Napa River and San Pablo Bay Discharge**

Impacts under Salinity Reduction Option 2 (Impacts T-2, T-3, and T-4) are nearly the same as those under Salinity Reduction Option 1A.

## **10.2.7 Water Delivery Option**

### **10.2.7.1 Impact T-2: Temporary Increase in Traffic Volumes as a Result of Project Construction**

#### **Water Delivery Project Component**

Construction of the Sonoma, CAC, and Napa Pipelines could temporarily increase the traffic along local roadways. Roads near the Sonoma Pipeline that may be used for construction-related travel include Ramal, Duhig, Las Amigas, and Buchli Station Roads, all of which are rural roads with relatively light traffic during weekday hours, and SR 12/121 and SR 37, which provide areawide access to regional highways such as I-80 and U.S. 101. Roads near the Napa Pipeline also include Las Amigas and Buchli Station Roads as well as Stanly Lane, Cuttings Wharf Road, and Milton Road.

In July 1999, Napa County performed traffic counts on Las Amigas Road and Duhig Road. On Las Amigas Road, county personnel found 318 vehicles 60 yards east of Duhig Road; 1,501 vehicles 30 yards north of the Milton intersection; and 590 vehicles 30 yards east of Buchli Station Road. On Duhig Road, they found 675 vehicles 30 yards south of Las Amigas Road and 902 vehicles 30 yards north of Las Amigas Road. Caltrans has monitored SR 121 and found an average of 30,500–33,500 trips per day at Duhig Road and an average of 18,600–19,000 trips per day at 8th Street (California Department of Transportation 2002).

Roads near the CAC Pipeline that may be used for construction travel include Green Island Road, SR 29/12, and I-80. Caltrans found an average of 40,500 trips per day on SR 29 at Green Island Road (California Department of

Transportation 2002). The construction-related increase in traffic associated with either pipeline would be negligible, as described below.

Trips generated in conjunction with pipeline construction activity would typically include

- worker commutes that, assuming an average crew size of 10 and use of crew (pickup) trucks to transport the workers, would generate approximately four trips per day;
- equipment/supply deliveries at an average of one truck trip per day, which using a passenger car equivalent factor of 2.0 (i.e., the movement of one truck in traffic would have the same impact on traffic movements as two passenger vehicles), would generate two (passenger car equivalent) trips per day;
- export of earth from trenching operations at an average rate of six truck trips per day, which equals 12 passenger car equivalent trips; and
- miscellaneous trips of approximately four per day.

As such, the total daily trip generation associated with construction activities would be approximately 22. Most of these trips would occur during nonpeak travel hours. Although there would be additional trips associated with individual workers traveling to and from the crew assembly–pickup/dropoff area, these trips, which would total 20 per day at most, are also considered to be negligible and most, if not all, would occur during nonpeak travel hours. Such capacity impacts would be temporary (a total of 1 year) and transitory in nature (i.e., construction-related trips would occur in different areas and possibly on different streets, depending on the active segment of construction along the pipeline route). Even if dual (or triple for the Sonoma alignment) crew teams are applied for multiple work sites on alignment of each pipeline, the increased trip generation (i.e., approximately 44–66 trips per day per pipeline) occurring primarily during nonpeak travel hours would not represent a substantial increase in traffic on the local street system.

In summary, implementation of the proposed Project Component of the Water Delivery Option would not result in a substantial increase in existing traffic volumes. This impact is considered less than significant. No mitigation is required.

## **Water Delivery Program Component**

Exact alignments and construction methods have not yet been determined for the pipelines associated with the Program Component of the Water Delivery Option (i.e., pipelines from the City of Petaluma, Novato SD, and LGVSD WWTPs). It is anticipated, however, that the general nature of construction activity and associated trip generation for those pipelines would be comparable to that described above for the Sonoma, CAC, and Napa Pipelines. Given the relatively low volume of construction trips and the fact that most trips would occur during

nonpeak travel hours, implementation of any of the potential future pipelines is not expected to cause an increase in traffic that is substantial to the existing traffic load and capacity of the local street system. This impact is considered less than significant. No mitigation is required.

### **10.2.7.2 Impact T-3: Increase in Construction-Related Traffic Hazards**

#### **Water Delivery Project Component (Overview)**

As subsurface facilities, neither of the currently proposed pipelines would increase traffic hazards because of a design feature. Construction of the pipelines could, however, introduce temporary hazards. Such hazards could affect

- rail traffic for the portion of the Sonoma Pipeline proposed to be constructed within a railroad ROW,
- roadway traffic for the portion of the Sonoma Pipeline proposed to be constructed along the access road to the Napa River Unit,
- roadway traffic for the portion of the CAC Pipeline proposed to be constructed along Green Island Road, and
- roadway traffic for the portion of the Napa Pipeline proposed to be constructed along Buchli Station Road.

Potential impacts specific to each segment are described below.

#### **Water Delivery Project Component (Sonoma Pipeline and Railroad Right-of-Way)**

The proposed Sonoma Pipeline includes a 5,100-foot segment along the south side of the existing railroad tracks and a 12,000-foot segment along the north side of the railroad tracks. Currently, there are no railroad operations on this particular length of track. Should operation of this railroad line resume before or during development of the Sonoma Pipeline, there would be the potential for construction-related hazards to, or from, railroad traffic. This impact is considered significant. Implementation of Mitigation Measure T-1 would reduce this impact to a less-than-significant level.

#### **Mitigation Measure T-1: Implement Safety Plan for Pipeline Construction along Rail Line**

Before beginning pipeline construction, the general contractor will coordinate with appropriate rail line officials to (1) assess the likelihood and timing, if any, of resuming operation of the subject line; and (2) prepare and implement, as appropriate, a safety plan specifically addressing potential hazards associated with rail operations occurring during the construction program. The plan will

address, among other things, appropriate safety setback requirements for equipment and construction personnel relative to the track location, procedures to be followed when a train approaches and passes by the construction site, communication protocols, and specifications for how the construction site is to be secured during nonworking hours/days. The general contractor will ensure that the safety plan is provided and properly communicated to all subcontractors and field personnel, as appropriate.

### **Water Delivery Project Component (Sonoma Pipeline and Napa River Unit Access Road)**

The Sonoma Pipeline includes a segment of approximately 4,200 feet that would be constructed along the access road to the Napa River Unit. The majority of this road is a service road accessible only to, or through, DFG personnel and is not available to the general public. Given the very low volume of traffic and slow travel speeds on this road, especially during weekdays when construction activity would be occurring, no notable traffic hazards are anticipated. DFG personnel would need access to the marsh area at all times for routine monitoring and maintenance, and all construction activities would be coordinated with their field staff. The construction activity area would be clearly delineated, would be readily visible to motorists, and would include a flagman if and as appropriate. This impact is considered less than significant. No mitigation is required.

### **Water Delivery Project Component (CAC Pipeline and Green Island Road)**

Development of the CAC Pipeline would include construction activity along Green Island Road that could extend into travel lanes. This impact is considered significant. Implementation of Mitigation Measure T-2 would reduce this impact to a less-than-significant level.

#### **Mitigation Measure T-2: Implement Safety Plan for Construction along Public Roads**

For each pipeline project, the construction contractor will prepare and implement a traffic safety plan for construction activities along a public road. Theis requirement for this plan will be included in the construction plan specifications for the project. Specifications will include the requirement for each plan to be submitted for review and approval by the traffic engineering department(s) with jurisdiction over the potentially affected roadways, including Caltrans for activities proposed on any state highway. The plan will require the construction contractor to provide and maintain typical measures such as placement of signage, high-visibility traffic cones, nighttime lights/reflectors, and/or other such safety markers around the activity area, extended a sufficient distance to allow motorists to safely maneuver around the area in advance. If and as appropriate, traffic control personnel/flagmen will be used.

## **Water Delivery Project Component (Napa Pipeline and Buchli Station Road)**

Transportation effects for the roadways in Segment 1 have been evaluated previously and found to be less than significant. Development of Segment 2 of the Napa Pipeline would include construction activity along Buchli Station Road that would extend into the travel lanes. This impact is considered significant. Implementation of Mitigation Measure T-2, described above, would reduce this impact to a less-than-significant level.

## **Water Delivery Program Component**

Exact alignments and construction methods have not yet been determined for the pipelines associated with the Program Component. It is anticipated, however, that construction of the potential future pipelines would include activities along portions of several major roadways including U.S. 101 and SR 37, SR 116, and SR 121. Such activity poses the potential for significant traffic hazard impacts, especially given the high traffic volumes and travel speeds along some segments.

In addition to construction along major roadways, the Program Component includes pipeline segments that would likely occur along railroad ROWs. These impacts are considered significant. Implementation of Mitigation Measures T-1, “Implement Safety Plan for Pipeline Construction along Rail Line,” and T-2, “Implement Safety Plan for Construction along Public Roads,” would reduce these impacts to a less-than-significant level. These measures are described above.

### **10.2.7.3 Impact T-5: Individual or Cumulative Exceedance of an Established Level-of-Service Standard**

#### **Water Delivery Project Component**

Construction of the Napa, CAC, and Sonoma Pipelines, as described above, would not result in a significant increase in traffic. The construction-related traffic generation would be low in volume and temporary (a total of 1 year) and transitory in nature, and would occur primarily during nonpeak travel hours. As such, it is unlikely that the construction traffic would cause an exceedance of an LOS standard, be it a congestion management plan standard or a local standard. This conclusion applies to both the Sonoma Pipeline, CAC Pipeline, and the Napa Pipeline, individually and in combination.

If the three projects were to be constructed simultaneously, the total traffic generation at the construction site would only be approximately 66 trips per day, or 120–125 trips per day if dual (or triple for the Sonoma Pipeline) work crews were used on each pipeline. The vast majority of these trips would occur during

nonpeak travel hours on rural roadways that have relatively light traffic during weekday hours. The exception would be SR 121, used for construction crew access for a segment of the Sonoma alignment; this highway is more frequently traveled than the rural roadways along the majority of the Sonoma, CAC, and Napa alignment. However, there would be only one crew using this access point, for approximately 20 trips per day. This additional traffic volume would not substantially increase the existing LOS. Additionally, given the relative locations of the three projects, there would be few, if any, roads that would be adversely affected by traffic from the projects. This impact is considered less than significant. No mitigation is required.

### **Water Delivery Program Component**

Exact alignments and construction methods have not yet been determined for the pipelines associated with the Program Component of the Water Delivery Option. It is anticipated, however, that construction-related impacts of the potential future pipelines would be comparable to those described above for the Project Component. Implementation of each pipeline comprising the Program Component is not expected to cause an exceedance of an LOS standard. In the event that construction of the City of Petaluma, Novato SD, and LGVSD pipelines were to occur simultaneously, portions of SR 37 and SR 121 and possibly U.S. 101 would be affected by the combined total traffic of the three projects. That total, however, would be only about 66 trips per day, would be temporary and transitory in nature, and be distributed primarily during nonpeak travel hours. As such, it is unlikely that the combined construction traffic would cause an exceedance of an LOS standard. This impact is considered less than significant. No mitigation is required.

## **10.2.8 Habitat Restoration Option 1: Mix of Ponds and Tidal Marsh**

Impacts under Habitat Restoration Option 1 are nearly the same as those under Salinity Reduction Option 1A for Impacts T-3 and T-4. Impact T-2 is slightly different and is described below.

### **10.2.8.1 Impact T-2: Temporary Increase in Traffic Volumes as a Result of Project Construction**

Transportation impacts are expected to be limited to those from construction equipment necessary for levee repair and water control structure maintenance at Ponds 1, 1A, 2, 6/6A, 7, 7A, and 8. Construction activities would be less intensive than under the salinity reduction options. Therefore, this impact is considered less than significant. No mitigation is required.

## **10.2.9 Habitat Restoration Option 2: Tidal Marsh Emphasis**

Impacts under Habitat Restoration Option 2 (Impacts T-2, T-3, and T-4) are nearly the same as those under Salinity Reduction Option 1A. Slightly more watercraft traffic may be generated as a result of more initial construction for habitat restoration.

## **10.2.10 Habitat Restoration Option 3: Pond Emphasis**

Impacts under Habitat Restoration Option 3 (Impacts T-2, T-3, and T-4) are nearly the same as those under Salinity Reduction Option 1A. Slightly more watercraft traffic may be generated as a result of increased maintenance and repair of the Pond 4/5 levees.

## **10.2.11 Habitat Restoration Option 4: Accelerated Restoration**

Impacts under Habitat Restoration Option 4 are nearly the same as those under Salinity Reduction Option 1A for Impacts T-2 and T-3. Impact T-4 is slightly different and is described below.

### **10.2.11.1 Impact T-4: Increase in Watercraft Traffic in the Napa River**

This option calls for proportionately more watercraft traffic than do the other options. This option would require delivery of dredged sediment from nearby areas and an increase in the number and length of starter channels and berms constructed in the ponds. A low-profile hopper dredge would be used to suction sediment from the designated sediment source, and would pump the sediment into the project area. The actual dredging would most likely occur as part of another project (i.e., the Napa River Federal Channel maintenance dredging), and impacts related to dredging are not addressed in the document. Only a slight increase in watercraft traffic would occur under this option, and this increase is not expected to adversely affect other watercraft traffic. Therefore, this impact is considered less than significant. No mitigation is required.