

Chapter 11. Transportation

Affected Environment

Data Sources

Information from the Hamilton Army Airfield Disposal and Reuse EIS (U.S. Army Corps of Engineers 1996a) and the Oakland Harbor Navigation Improvement Project (U.S. Army Corps of Engineers and Port of Oakland 1998e) was used to prepare this analysis.

Roadway Network

Regional Access

Regional access to the HAAF, SLC, and BMKV parcels is provided by U.S. Highway 101 and State Route 37. U.S. Highway 101 is a principal north-south freeway connecting HAAF to Sonoma County to the north and San Francisco Bay Area to the south. State Route 37 extends east from U.S. Highway 101 in Novato to Interstate 80 in Vallejo. Figure 11-1 identifies major roadways in the project area.

Access to Project Area

Access to the HAAF parcel is currently provided by Ignacio Boulevard, Alameda del Prado, Nave Drive, Main Gate Road, and State Access Road. All vehicles traveling to and from HAAF currently use Nave Drive. This road is a two-lane facility extending north from Alameda del Prado to the U.S. Highway 101 interchange at Ignacio Boulevard. Nave Drive connects to Main Gate Road and State Access Road, which provide access to HAAF.

A permanent access route would be established over a proposed easement connecting Nave Drive with the HAAF parcel (Figure 3-3). This easement would be the primary access route to the restoration site for construction and maintenance purposes.

No public roads are present in the HAAF parcel. Access around the area is provided by Perimeter Road. The number of trips made to the HAAF parcel is unknown; however, the area is not open to the public. Access to the SLC parcel is provided by a legally deeded access easement across HAAF. Although no official map of the easement exists, it is described as a 40-foot easement that extends from the entrance of HAAF to the SLC property adjacent to the bay over existing roads, including Main Gate Road, Palm Drive, Hangar Avenue, and Perimeter Road.

Access to the BMKV parcel is provided by Ignacio Boulevard and Bel Marin Keys Boulevard. No public roadways exist within the BMKV parcel. The existing private roads are used primarily for agricultural operations.

Existing Levels of Service

The existing level of service (LOS) for each critical intersection in the project area has been estimated, ranging from A to E during a.m. and p.m. peak hours (Table 11-1). The LOS for existing peak-hour freeway operations is estimated to range from D to E/F on U.S. Highway 101 and is estimated at B on State Route 37 between U.S. Highway 101 and Atherton Avenue (Table 11-2).

Vessel Transportation

Regional commercial vessel traffic in San Pablo Bay is restricted to the San Pablo Strait Channel Regulated Navigation Area established by the U.S. Coast Guard. This channel delineates the only area where the water depths are sufficient to allow the safe transit of large vessels through San Pablo Bay.

Regional noncommercial vessel traffic, including recreational use, occurs in the western portion of San Pablo Bay. The Petaluma River navigation channel is located east of the hydraulic off-loader sites. Nearby recreational boat access points include a boat launch ramp at Black Point approximately 4 miles north, the Port Sonoma Marina approximately 4 miles north, Novato Creek approximately 3 miles north, Las Gallinas Creek approximately 3 miles south, and China Camp State Park approximately 4 miles south.

Environmental Consequences and Mitigation Measures

This section discloses impacts on transportation associated with construction and operation of each project alternative. Impacts associated with transporting materials from the dredge site to the hydraulic off-loaders have been evaluated as part of other environmental documentation for the Oakland Harbor navigation improvement project (U.S. Army Corps of Engineers and Port of Oakland 1998a, 1998b, 1998c, and 1998d). The document concluded that transporting dredged material by barge would not result in a significant impact on transportation.

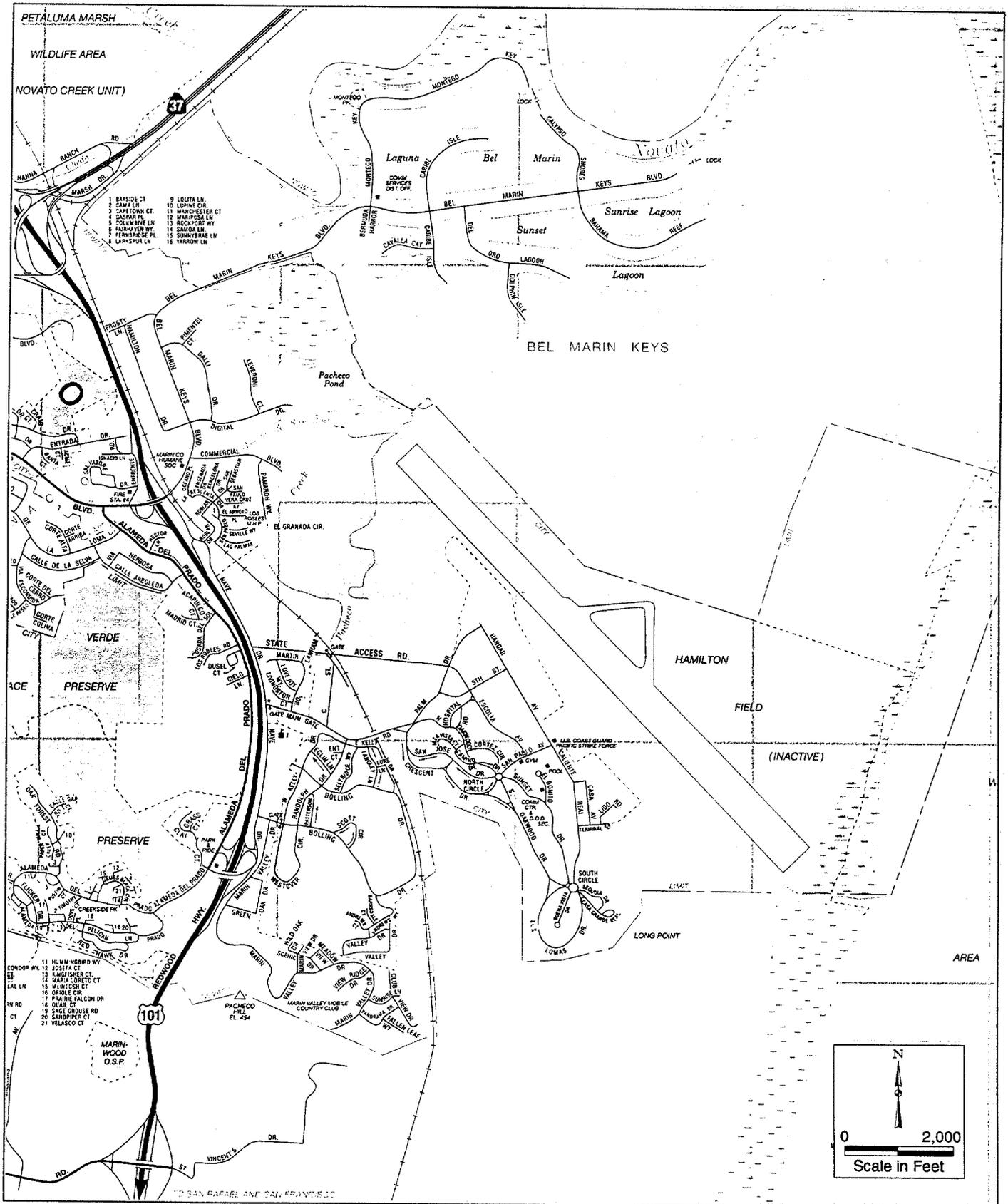


Figure 11-1
Transportation Network in the Project Area

Approach and Methods

The wetland restoration project could result in impacts associated with construction, operation, and maintenance of the project site. Construction-related impacts could result from trips to and from the project site made by construction workers and from installation and operation of the hydraulic off-loaders and piping. Operation and maintenance impacts could occur as a result of trips made to the site by caretakers, researchers, or visitors.

Assigning LOS is a quantitative method for describing traffic conditions on intersections and road segments. LOS ranges from A (uncongested) to F (totally congested). This evaluation is based on the traffic model used by the Army in the Hamilton Army Airfield Disposal and Reuse EIS (U.S. Army Corps of Engineers 1996a) to evaluate the impacts of different reuse scenarios on roadway LOS in the project area. (The model was first developed to evaluate buildout of the New Hamilton Partnership development.) This model predicted the LOS for eight intersections in the project area and nine major highway segments (eight segments of U.S. Highway 101 and one segment of State Route 37). The results of the analysis of no-action conditions from the HAAF disposal and reuse EIS were used to characterize conditions under Alternative 1: No Action for this project because that scenario represents buildout of the New Hamilton Partnership project combined with no reuse of the HAAF or SLC parcel.

The total number of daily trips generated during the construction phase of the restoration project was based on the equipment estimated to be needed during the construction phase of the project, especially while levees would be constructed. Based on the number of pieces of construction equipment needed, construction of the project was estimated to result in an increase of approximately 38 daily vehicle trips to the project site, including 15 trips each during the morning and evening commute period and eight during the lunch hour. The methods and assumptions used to arrive at this estimate are described in Appendix E.

Although the restoration project does not include a formal public recreation component, visitation by the public would be allowed after construction is completed. Public use would be restricted to the New Hamilton Partnership flood control levee. Trips associated with public use and operation and maintenance of the project are expected to be minimal and are not expected to affect circulation patterns or capacity at nearby intersections or roadway segments.

Thresholds of Significance

According to Appendix G of the State CEQA Guidelines, a project will normally have a significant impact on the environment if it would result in an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. Impacts on shipping and recreational boating were considered significant if the project would restrict navigation or create a navigational hazard.

Impacts and Mitigation Measures of Alternative 1: No Action

Under Alternative 1: No Action, no wetland restoration would occur. The project site would not be transferred to the Coastal Conservancy, and the Army would maintain ownership of the HAAF parcel and continue to clean up the site. No impacts on LOS at important intersections and roadway segments would be expected because no activities associated with wetland restoration or other reuse activities would occur.

Impacts and Mitigation Measures Common to Alternatives 2, 3, 4, and 5

Impact 11.1: Change in LOS at Important Intersections and Roadway Segments during Construction Phase

As indicated under “Approach and Methods” above, restoration of wetlands at the project site is estimated to increase the number of vehicle trips to the project site by 38 per day under Alternatives 2-5. Based on the LOS for intersections and roadway segments shown in Table 11-1, the daily increase in traffic would not change LOS on freeway segments or important intersections. Because the minimal increase in daily traffic is not expected to result in a change in LOS, the impact on transportation under Alternatives 2-5 is considered less than significant and no mitigation is required.

Impact 11.2: Change in LOS at Important Intersections and Roadway Segments during Operation Phase

During the operation phase of the proposed project under Alternatives 2-5, trips to the HAAF and SLC parcels would increase slightly compared to conditions under Alternative 1. Most of the additional trips would relate to maintenance and monitoring activities. The number of daily trips cannot be estimated accurately; however, traffic is expected to be greatly reduced from levels expected during the construction phase. The number of additional trips attributable to maintenance and monitoring would be extremely small compared to the volume of traffic at important intersections and roadway segments under Alternative 1 (Table 11-1). The impact on circulation attributable to project operation is considered less than significant because the LOS at roadway segments and intersections is not expected to change. No mitigation is required.

Impacts and Mitigation Measures Unique to Alternative 3

Impact 11.3: Disruption of Vessel Transportation in San Pablo Bay by Hydraulic Off-loaders and Pipes during Construction Phase

Installing and operating the hydraulic off-loaders and piping could result in impacts on vessel transportation. Installation and use of the hydraulic off-loaders would not result in a conflict with vessel transportation in the area because the hydraulic off-loaders would not be located within established navigation routes and the project sponsor would be required by the U.S. Coast Guard to properly mark and light the off-loaders to prevent navigational hazards to watercraft using the area at all times of the day and night. The piping would be submerged and would not present a navigational hazard during or after installation.

The U.S. Coast Guard publishes specific “rules of the nautical road” that govern dredging operations in inland waterways. Specific markings on and lighting of dredging equipment allow mariners to readily recognize the operations and maneuver appropriately. These specific rules for marking equipment apply to the dredge site and the equipment used to transport dredged material associated with the proposed project (i.e., hydraulic off-loaders and pipes). The dredging contractor would be required to adhere to these requirements. Because established navigation routes would not be disrupted and facilities would be marked and lighted consistent with existing regulations, the impact on vessel transportation under Alternative 3 is considered less than significant and no mitigation is required.

Impacts and Mitigation Measures Unique to Alternative 4

No impacts and mitigation measures would be unique to Alternative 4.

Impacts and Mitigation Measures Unique to Alternative 5

The impact on vessel transportation during the construction phase of Alternative 5 would be the same as that described for Alternative 3 under Impact 11.3. This impact is considered less than significant and no mitigation is required.

Potential Issues and Resolutions under the Bel Marin Keys V Scenario

Potential Issue: Change in LOS at Important Intersections and Roadway Segments during Construction Phase

The effect on transportation during the construction phase of the BMKV Scenario would be similar to that described for Alternatives 2-5 under Impact 11.1. This effect would not be considered significant.

Potential Issue: Change in LOS at Important Intersections and Roadway Segments during Operation Phase

The effect on transportation during the operation phase of the BMKV Scenario would be similar to that described for Alternatives 2-5 under Impact 11.2. This effect is not considered significant.

Potential Issue: Disruption of Vessel Transportation in San Pablo Bay by Hydraulic Off-Loader and Pipes during Construction Phase

The effect on transportation during the operation phase of the BMKV Scenario would be similar to that described for Alternatives 3 and 5 under Impact 11.3. This effect is not considered significant.