

4.11 Transportation and Traffic

4.11.1 Introduction

This section evaluates whether implementation of the Russian River Estuary Management Project (Estuary Management Project) would result in potential adverse impacts related to transportation and traffic. The Setting describes regional and local access to the project area. The Regulatory Framework describes pertinent state, and local laws related to traffic considerations of the proposed project. The Impacts and Mitigation Measures section defines significance criteria used for the impact assessment and presents a discussion of potential project-related impacts. The evaluation and analysis are based, in part, on review of various maps, aerial imagery, and reports. The primary sources include available resources from the *Sonoma County General Plan 2020* (2008), Sonoma County Transportation Authority (SCTA), and California Department of Transportation (Caltrans).

4.11.2 Setting

The Estuary Management Project area is located within unincorporated Sonoma County. Under the *Sonoma County General Plan 2020*, circulation and transit planning are organized by specific planning areas. The Estuary Management Project is within the Sonoma Coast/Gualala Basin and the Russian River Planning Areas. The roadway network that would be used for access for construction workers and construction vehicles consists of regional highways and local roadways.

Regional and Local Roads

The Sonoma Coast/Gualala Basin region has a limited roadway network due to its remote location and low population density. The major highways are State Route 1 (SR 1) and SR 116. These roadways provide the primary means of travel throughout the study area. All highways in the region are two-lane rural roadways. The Russian River Area has a relatively extensive road network in the Russian River resort corridor. Many local roads are very narrow and do not meet modern standards. Traffic patterns in the Sonoma Coast/Gualala and Russian River Areas are affected primarily by recreational travel, particularly on weekends (Sonoma County, 2008).

SR 1, often called Highway 1, is a state highway that runs along much of the Pacific coast of California. SR 1 varies from a two-lane surface state highway (with at-grade intersections) to a multi-lane freeway (with ramp interchanges). The portion of SR 1 within the project area is a two-lane surface state highway and is classified as a “Rural Minor Arterial” under the Sonoma County General Plan. Traffic on SR 1 connects to Goat Rock Road, which leads to the project site. The most recent data published by Caltrans indicates the average daily traffic volume on SR 1 is about 2,650 vehicles between SR 116 and Jenner (Caltrans, 2009).

SR 116 is a two-lane surface highway connecting SR1 to SR 12, proceeding east along the north bank of the Russian River, from SR 1 to Guerneville, passing through Duncans Mills, Monte Rio, and Guerneville Park. In this section, it is generally called River Road. At Guerneville, the route

turns south-east and passes through Forestville, Graton, and Sebastopol (where it intersects SR 12) to join U.S. Highway 101 in Cotati. The portion of SR 116 through Duncans Mills and near the project area is classified as a “Rural Principal Arterial” under the Sonoma County General Plan. The most recent data published by Caltrans indicates the average daily traffic volume on SR 116 ranges from 2,400 to 8,400 vehicles between SR 1 and Guerneville (Caltrans, 2009).

Local Roads

Goat Rock Road is a paved narrow two-lane road that runs west from SR 1 to State Parks Road and provides access to the entrance of Goat Rock State Beach. This road is typically used by Goat Rock State Beach staff and visitors. Water Agency staff currently uses Goat Rock Road for access to breach the barrier beach that forms at the mouth of the Russian River, between one and thirteen times annually. This road would be used by project vehicles to access the proposed outlet channel site.

State Parks Road is a paved narrow two-lane road that connects Goat Rock Road to access points for Goat Rock State Beach. State Parks Road terminates at two parking lot facilities, one for north access to Goat Rock State Beach and one for south access. The south parking provides approximately 100 parking spaces and access to Goat Rock and south Goat Rock State Beach. The north parking lot provides approximately 35 parking spots and access to north Goat Rock State Beach and views of the mouth of the Russian River. This latter parking lot is currently used by Water Agency staff as a staging site for mechanically breaching the barrier beach at the mouth of the Russian River. Typically four to five staff vehicles caravan to the project area, and one staff vehicle and a bulldozer or similar equipment is offloaded in the parking lot during the breaching between one and thirteen times annually. Approximately two or three parking spaces are used for vehicle and equipment staging, however equipment or vehicle are removed daily and not stored overnight.

Transit

Sonoma County Transportation Authority (SCTA) provides access to the Russian River from Santa Rosa via Sebastopol. Sonoma County Transit also provides intercity transit service for the Russian River, serving the Jenner and Duncans Mills areas (SCTA, 2006 and Sonoma County, 2008). Route 28 serves the Russian River area and provides access between Guerneville, Villa Grande, Sheridan, Duncans Mills, Monte Rio, Camp Meeker, and Occidental. Route 28 operates Monday through Friday from 6:30 a.m. to 6:30 p.m.

Mendocino Transit Agency provides access to northern Mendocino County communities from Santa Rosa. Route 95 is routed on SR 1 and SR 12 and provides access to coastal communities from Santa Rosa north to Fort Bragg. Route 95 operates Monday through Saturday from 8:00 a.m. to 11:00 a.m. (southbound) and in the afternoon from 3:45 p.m. to 7:05 p.m. (northbound) (MTA, 2008).

Bicycle and Pedestrian Facilities

Under the *Sonoma County General Plan 2020*, bikeways are classified into three types denoting a degree of separation from traffic on the roadway, as follows:

1. Class I: completely separated right-of-way designated for the exclusive use of bicycles;
2. Class II: a striped lane (right-of-way) on the roadways, designated for use by bicyclists; and
3. Class III: a shared right-of-way within the road width, designated as a bicycle route by signing or stenciling on pavement.

Although there are no existing designated bikeways within the Estuary Management Project area, SR 116 (River Road) is a highlighted bicycle route on Sonoma County's regional bicycle network (Sonoma County, 2008). Additionally, the bicycle system of Sonoma County is not complete and several upgrades are proposed within the project area:

1. Class I Bike Path (Proposed) adjacent to SR 116 (River Road) from Duncans Mills west to Jenner, called Willowcreek Trail;
2. Class II Bike Lane (Proposed) SR 116 (River Road);
3. Class II Bike Lane (Proposed) SR 1, south of the Russian River crossing and Goat Rock State Beach ; and
4. Class III Bike Route (Proposed) SR 1, north of the Russian River crossing and Goat Rock State Beach.

Pedestrian facilities provide safety to pedestrians against vehicular traffic and generally include sidewalks, crosswalks, and pedestrian signals. Sonoma County Transportation Authority distinguishes Pedestrian Districts for planning purposes (SCTA, 2008). Jenner is in the County of Sonoma Pedestrian District "T". Duncans Mills is in County of Sonoma Pedestrian District "K" (SCTA, 2008). Pedestrian facilities are very limited in Jenner. SR 1, which runs through Jenner, does not have sidewalks, stop signs, crosswalks or traffic lights. Likewise, Duncans Mills also has very limited pedestrian facilities, including limited sidewalk and no crosswalks, or pedestrian signals. However, Duncans Mills has sidewalk over the Moscow Road crossing of the Russian River.

4.11.3 Regulatory Framework

Federal

There are no federal regulations for transportation and traffic related to the proposed project.

State

Caltrans manages interregional transportation, including management and construction of the California highway system. In addition, Caltrans is responsible for permitting and regulation of the use of state roadways. The action areas include several roadways that fall under Caltrans' jurisdiction including SR 1 and SR 116.

Caltrans' construction practices require temporary traffic control planning during any time the normal function of a roadway is suspended (Caltrans, 2006). In addition, Caltrans requires that permits be obtained for transportation of oversized loads and transportation of certain materials, and for construction-related traffic disturbance. Caltrans regulations would apply to the transportation of construction crews and construction equipment through the project area (Caltrans, 2007).

Local

Sonoma County Transportation Authority (SCTA)

The SCTA was formed as a result of legislation passed in 1990. The SCTA serves as the coordinating and advocacy agency for transportation funding for Sonoma County. The SCTA acts as the countywide planning and programming agency for transportation related issues: securing funds, project oversight and long term planning.

Sonoma County Road Maintenance Districts

The road maintenance districts provide maintenance services on non-County roads in private subdivisions. The permanent road districts were established prior to the passage of Proposition 13. Road maintenance work within these districts is done on an as-needed basis, subject to the availability of funds which are collected through property assessment fees.

Sonoma County General Plan

Local policies established in the *Sonoma County General Plan 2020* that govern geologic resources in the project area are summarized in Section 4.11 in **Appendix 4.0, Local Regulatory Framework Governing Environmental Resources**.

4.11.4 Environmental Impacts and Mitigation Measures

Significance Criteria

The thresholds for determining the significance of impacts for this transportation and circulation analysis are based on the environmental checklist in Appendix G of the CEQA Guidelines. For this analysis, the project would be considered to have a significant impact on transportation and circulation if it would:

1. 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;
2. 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;

3. 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;
4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
5. Result in inadequate emergency access;
6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

In addition to the above-listed criteria, the following criteria are derived from common engineering practice to apply to the project-specific analysis presented herein:

1. Substantially increase traffic safety hazards due to increased traffic volumes; or
2. Cause substantial damage or wear of public roadways by increased movement of heavy vehicles;
3. Cause substantial loss of parking facilities or inadequate parking capacity.

This analysis relies upon available information and field reconnaissance of roadway characteristics (e.g., pavement widths). Impacts to traffic and circulation that would result from increases in traffic volumes, loss of travel lanes and/or parking areas, and potential safety effects associated with construction were evaluated. Construction characteristics, including proposed manpower and equipment, location of construction, and rate of construction were used to conservatively determine the potential number of vehicles that could be required for the Estuary Management Project.

Several of the criteria included in Appendix G of the CEQA Guidelines do not apply to this analysis and are not used, as explained below.

Conflict with an Applicable Congestion Management Program and Exceedance of LOS Standards Established by the County Congestion Management Agency. During installation and maintenance of the outlet channel, traffic is anticipated to be similar to the existing traffic and circulation conditions within the action area, with the addition of a minimal increase in maintenance worker trips. Increases in traffic volumes generated by construction projects end when construction activities end. As such, county LOS standards are not used to judge potential project impacts presented herein.

Air Traffic Patterns. There are no airports within 10 miles of the project area; therefore the Estuary Management Project would not 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.

Increased Hazards Due to a Design Feature or Incompatible Uses. The Estuary Management Project would not include new design features within public roadways (e.g., new facilities or obstructions) or alterations of existing features (e.g., road realignment). In addition, traffic generated by the Estuary Management Project would be compatible with the mix of vehicle types (autos and trucks) currently using project area roads. Therefore, the Estuary Management Project would not result in hazards caused by a design feature or incompatible use.

Conflicts with Adopted Policies, Plans, or Programs Supporting Alternative Transportation. The Estuary Management Project would not directly or indirectly eliminate alternative transportation corridors or facilities (e.g., bike paths, lanes, bus turnouts, etc.). In addition, the Estuary Management Project would not include changes in policies or programs that support alternative transportation. Therefore, the Estuary Management Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Approach to Analysis

This analysis focuses on the potential for project implementation to affect roadways and traffic within the project area, defined above. It considers the proximity to the project and level of exposure to potential impacts. As noted in **Chapter 2.0, Project Description**, the Water Agency would continue its current practice of artificial breaching outside of the lagoon management period of May 15 through October 15. Timing, implementation, access, sensitivity to pinniped haulout, personnel, equipment, and general procedures would be equivalent to current practices, as described in **Section 2.2.2**. No change to artificial breaching outside of the lagoon management period would occur under the Estuary Management Project.

Impact Analysis

Impacts associated with traffic and transportation are summarized and categorized as either “less than significant,” “less than significant with mitigation,” or “significant and unavoidable.”

Impact 4.11.1: Conflict with Transportation Policies. The Estuary Management Project could 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. (Less than Significant)

The Estuary Management Project would require limited vehicle and equipment use during the installation and maintenance of the proposed outlet channel. The vehicles would use SR 1, Goat Hill Road, Goat Rock Road, and State Parks Road to access the beach management area (proposed outlet channel site). Channel creation and maintenance related vehicle trips would include transportation of equipment and approximately four to five Water Agency vehicles traveling to and from the project area. Construction would be temporary, and vehicle use would be limited to one or two pieces of heavy equipment (e.g. excavator or bulldozer) and approximately four or five staff vehicles (typically small pickup trucks). The number of construction-related vehicles traveling to and from the project construction area would vary depending on the maintenance need, but would typically be four to five vehicles for the initial installation of the outlet channel, and fewer than that depending on the extent of the subsequent channel maintenance. At the start of the management period, when installing the outlet channel for the first time each year, construction vehicles may be in use up to two consecutive days. As noted in **Chapter 2.0, Project Description**, the frequency of equipment operation on the barrier during the lagoon management period may be incrementally increased compared to existing conditions, and could

include up to 18 maintenance activities over the course of the lagoon management period, depending upon the performance of the outlet channel. This represents an incremental increase in short-term truck trips.

Channel creation and maintenance traffic associated with the Estuary Management Project would be temporary and not result in significant increases in traffic volumes on roadways in the immediate vicinity of the proposed outlet channel at Goat Rock State Beach or along intended transportation routes. The installation and maintenance-related traffic would not interrupt intersections, streets, highways, mass transit service, or bicycle or pedestrian paths in the project area and would not significantly affect the effectiveness of the circulation system in the project area. Therefore, the Estuary Management Project would not conflict with applicable transportation policies in the project area, and the impact would be less than significant.

Impact Significance: Less than Significant; no mitigation measures are required.

Impact 4.11.2: Emergency Access. The Estuary Management Project could substantially impede access to local streets or adjacent uses, including access for emergency vehicles. (Less than Significant)

The Estuary Management Project would require one or two pieces of heavy equipment (e.g. excavator or bulldozer) and approximately four or five staff vehicles (typically small pickup trucks) for installation and maintenance of the proposed outlet channel. Although vehicles and equipment would be staged in the Goat Rock State Beach north parking lot, they would be located adjacent to beach access and would not interrupt local access to the beach entrance or to State Parks Road. Additionally, all construction equipment and vehicles would be removed from the project site at the end of daily construction activities. Access to the parking lot and transportation routes, including Goat Rock Road and State Parks Road, would be maintained at all times during construction and maintenance of the proposed outlet channel, and therefore, impacts to emergency access would be less than significant.

Impact Significance: Less than Significant; no mitigation measures are required.

Impact 4.11.3: Increased Traffic Safety Hazards. The Estuary Management Project could substantially increase traffic safety hazards due to increased traffic volumes. (Less than Significant)

As described for **Impact 4.11.1**, the Estuary Management Project would require limited equipment and vehicle use including one or two pieces of heavy equipment (e.g. excavator or bulldozer) and approximately four to five Water Agency vehicles for transporting staff to and from the project site. Equipment transportation and vehicle use would be temporary and short in duration

including one of two consecutive days for the initial installation of the outlet channel, and approximately once every weeks for maintenance during the lagoon management period.

As stated previously, there would not be a significant increase in traffic volumes on SR 1, Goat Hill Road, or State Parks Road resulting from construction traffic, nor would the project traffic substantially disrupt traffic flows on the local roadways or exceed the capacity of the street system. The traffic volumes associated with the Estuary Management Project would not substantially increase traffic safety hazards along transportation routes. The Estuary Management Project would have a less than significant traffic safety hazards impact.

Impact Significance: Less than Significant; no mitigation measures are required.

Impact 4.11.4: Roadway Wear. The Estuary Management Project could cause substantial damage or wear of roadways by increased movement of heavy vehicles. (Less than Significant)

The equipment and vehicle use associated with the Estuary Management Project could cause damage and wear to roadway pavements. The degree to which this impact would occur depends on the existing roadway design (pavement type and thickness), and how many (and over what period of time) heavy vehicles would be generated by Project activities. State highways such as SR 1 and SR 116 are designed to accommodate a mix of vehicle types, including heavy trucks. The Project's impact would be negligible on those roads. Goat Rock Road and State Parks Road would be used by Project vehicles to access the proposed outlet channel site. However, as described for **Impact 4.11.1**, the Estuary Management Project would require only one or two pieces of heavy equipment and up to five Water Agency vehicles for transporting staff to and from the project site. The implementation and maintenance activities would be short-term and not substantial enough to cause accelerated degradation to the roadway, and therefore, the Estuary Management Project would have a less than significant impact on roadway pavements.

Impact Significance: Less than Significant; no mitigation measures are required.

Impact 4.11.5: Parking. The Estuary Management Project could result in inadequate parking capacity. (Less than Significant)

The Estuary Management Project would require one or two pieces of heavy equipment (e.g. excavator or bulldozer) and approximately four or five staff vehicles (typically small pickup trucks) for installation of the proposed outlet channel. The Goat Rock State Beach north parking lot, located at the termination of State Parks Road, has approximately 35 existing parking spaces available for visitor use and provides access to Goat Rock State Beach. The Estuary Management Project would require use of the parking lot for staging of construction vehicles and equipment during

construction activities and for access to the channel outlet site. However, all construction equipment and vehicles would be removed from the project site at the end of daily construction activities.

The staging area would not impede local access to the beach entrance or to State Parks Road; however, it would require the use of approximately two or three parking spaces for equipment and four or five spaces for Water Agency vehicles, i.e., six to eight spaces in total. This would reduce the number of parking spaces available, which could inconvenience State Beach visitors; however, it would not result in inadequate parking for State Beach visitors, and the impact would be less than significant.

Impact Significance: Less than Significant; no mitigation measures are required.

4.11.5 References

- California Department of Transportation (Caltrans), 2008 Traffic Volumes on California State Highways, 2009, available online: <http://traffic-counts.dot.ca.gov/index.htm>, accessed April 16, 2010.
- California Department of Transportation (Caltrans), *California Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways*, September 2006.
- California Department of Transportation (Caltrans), *Construction Manual*, last revised September 2007.
- Mendocino Transit Authority (MTA), South Mendocino Coast Bus Schedule-Route 95, effective September 14, 2008.
- Sonoma County Permits and Resources Management Department (Sonoma County), *Sonoma County General Plan 2020*, Circulation Element, adopted September 23, 2008.
- Sonoma County Transportation Authority (SCTA), Proposed and Existing City and County Bicycle and Pedestrian Facilities, in *SCTA Countywide Bicycle and Pedestrian Master Plan*, May 2008.
- Sonoma County Transportation Authority (SCTA), Sonoma County Bus Routes Map, August 8, 2006, revised, August 22, 2006.