

4.12 Hazards and Hazardous Materials

4.12.1 Introduction

This section presents the existing hazards conditions and hazardous materials and evaluates potential impacts associated with hazards and hazardous materials from implementation of the Russian River Estuary Management Project (Estuary Management Project or proposed project). This section includes the existing setting, a regulatory database search for the action area, and the federal, state, and local regulations related to hazardous materials that would apply to the Russian River Estuary Management Project. The Impacts and Mitigation Measures section defines significance criteria used for the impact assessment and presents a discussion of potential project-related impacts, and associated mitigation, where feasible.

4.12.2 Setting

According to the U.S. Environmental Protection Agency (USEPA), materials and waste are considered hazardous based on four characteristics:

1. *Ignitability* – Ignitable wastes can create fires under certain conditions, are spontaneously combustible, or have a flash point less than 60 °C (140 °F). Examples include waste oils and used solvents.
2. *Corrosivity* – Corrosive wastes are acids or bases (pH less than or equal to 2, or greater than or equal to 12.5) that are capable of corroding metal containers, such as storage tanks, drums, and barrels. Battery acid is an example.
3. *Reactivity* – Reactive wastes are unstable under "normal" conditions. They can cause explosions, toxic fumes, gases, or vapors when heated, compressed, or mixed with water. Examples include lithium-sulfur batteries and explosives.
4. *Toxicity* – Toxic wastes are harmful or fatal when ingested or absorbed (e.g., containing mercury, lead, etc.).

According to the California Health and Safety Code (Section 25501), "hazardous material" means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials released from historical land uses could be encountered within the footprint of the proposed project (i.e. the outlet channel and the Estuary to be maintained behind the barrier of the outlet channel).

Potential Presence of Hazardous Materials in Soil and Groundwater

Land use adjacent to the project area is primarily open space and recreation, agricultural, residential, and commercial. Agricultural operations may involve the use of fuels, oils and greases, pesticides and herbicides, and fertilizers. Pesticides, herbicides, and fertilizers are applied directly to the soil or the crops in soil, and potential releases of fuels, oils, and greases can occur through spills and leaks from equipment or storage tanks. In addition, there is potential for release of hazardous

materials from unregulated, private refuse dumps in remote areas. Commercial and industrial operations, such as gasoline service stations, have the potential to release hazardous materials to soil and groundwater. Residential land use can also result in the release of hazardous materials from heating oil tanks or other equipment.

The potential to encounter hazardous materials in soil or groundwater as a result of the project is based upon review of the regulatory agency database search on the State Water Resources Control Board Geotracker website. The Geotracker website identifies the following types of environmental cases: leaking underground storage tank (LUST) sites; land disposal sites; military sites; California Department of Toxic Substances Control (DTSC) cleanup sites; other cleanup sites; permitted underground storage tank (UST) facilities; and permitted hazardous waste generators. A total of four cases were identified within one mile of the lagoon outlet channel, of which two are open cleanup sites. These facilities, the Jenner Shell at 10444 Highway One and the Jenner Bombing Target UST, are located across Highway 1 bordering the Estuary and approximately a mile from Goat Rock State Beach.

Wildfire Hazards

The California Department of Forestry and Fire Protection (CAL FIRE) fire hazard severity zone map (CAL FIRE, 2007) identifies the project area as moderate fire hazard zone, the lowest of its three categories.

Airports

There are no airports in the project vicinity. The nearest public airports and private airstrips are located approximately 15 miles east of the project area.

4.12.3 Regulatory Framework

Federal

The USEPA is the lead federal agency responsible for enforcing federal regulations regarding hazardous materials and hazardous waste. The primary legislation governing hazardous materials and hazardous waste are the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and the Superfund Amendments and Reauthorization Act (SARA).

RCRA

RCRA regulates the generation, transportation, treatment, storage and disposal of hazardous waste by “large-quantity generators” (1,000 kilograms per month or more) through comprehensive life cycle or “cradle to grave” tracking requirements. The requirements include maintaining inspection logs of hazardous waste storage locations, records of quantities being generated and stored, and manifests of pick-ups and deliveries to licensed treatment/storage/disposal facilities. RCRA also identifies standards for treatment, storage, and disposal.

CERCLA

CERCLA, also known as Superfund, created a tax on the chemical and petroleum industries to provide for response and cleanup of hazardous substances that may endanger public health or the environment. CERCLA established requirements for abandoned hazardous waste sites and provided for liability of persons responsible for releases of hazardous waste at these sites.

SARA

SARA amended CERCLA to increase state involvement and required Superfund actions to consider state environmental laws and regulations. SARA also established a regulatory program for USTs and the Emergency Planning and Community Right-to-Know Act.

Toxic Substances Control Act (TSCA)

TSCA established the mechanisms by which the USEPA tracks, screens, and tests industrial chemicals that are currently produced or imported into the United States that may pose an environmental or human-health hazard.

Occupational Safety and Health Act

The Occupational Safety and Health Administration (OSHA) administers the Occupational Safety and Health Act, which requires special training of handlers of hazardous materials, notification to employees who work in the vicinity of hazardous materials, and acquisition from the manufacturer of material safety data sheets (MSDS). An MSDS describes the proper use of hazardous materials. The Act also requires and training of employees to remediate any hazardous material accidental releases.

State

The California Department of Toxic Substances Control (DTSC) is primarily responsible for the regulation of hazardous materials in California. DTSC is responsible for the management of hazardous substances and oversees the investigation and remediation of contaminated sites. The North Coast Regional Water Quality Control Board (RWQCB) is primarily responsible for the protection of groundwater and surface water resources from hazardous materials.

California Hazardous Waste Control Law, California Health and Safety Code, Division 20, Chapter 6.5

The California Hazardous Waste Control Law is the basic hazardous waste statute in California and is administered by DTSC. This law is similar to, but more stringent than RCRA and applies to a broader range of hazardous wastes and requires recycling and waste reduction programs.

Carpenter-Presley-Tanner Hazardous Substances Account Act, California Health and Safety Code, Division 20, Chapter 6.8

The Carpenter-Presley-Tanner Hazardous Substances Account Act authorizes DTSC and the RWQCB to require, oversee, and recover costs for the remediation of sites where contamination of soil and water present a hazard to human health or the environment.

California Occupational Safety and Health Act

The California Occupational Safety and Health Administration (Cal OSHA) regulates worker safety similar to federal OSHA but also requires preparation of an Injury and Illness Prevention Program, an employee safety program of inspections, procedures to correct unsafe conditions, employee training, and occupational safety communication. In addition, Cal OSHA regulations indirectly protect the general public by requiring construction managers to post warnings signs, limit public access to construction areas, and obtain permits for work considered to present a significant risk of injury, such as excavations greater than five feet.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

Cal EPA adopted regulations in 1996 to establish a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program and designated local agencies called Certified Unified Program Agencies (CUPA). The local agencies regulate hazardous substances management with respect to the following areas:

1. Hazardous waste generators and hazardous waste onsite treatment;
2. USTs;
3. Aboveground storage tanks;
4. Hazardous materials release response plans and inventories (business plans), including Unified Fire Code hazardous materials management plans and inventories; and
5. Risk management and accidental release prevention programs.

The CUPA in the project area is the County of Sonoma Department of Emergency Services, Hazardous Materials Division.

Waters Bill of 1985 (Business Emergency Plan/Hazardous Materials Business Plan)

Administered by the CUPA, the Waters Bill requires facilities, which meet minimum hazardous materials use/storage thresholds to file a Business Emergency Plan (BEP), or a Hazardous Materials Business Plan (HMBP). A BEP or HMBP includes a complete inventory of the hazardous materials being used and stored on a site. Employee training and emergency response plans and procedures for the accidental release of hazardous materials are also included in a BEP.

Safe Drinking Water and Toxics Enforcement Act (Proposition 65)

Administered by the CUPA, the Safe Drinking Water and Toxics Enforcement Act requires businesses, which use hazardous materials to post public notice of release of any accidental

hazardous materials, or other potential exposure to materials known to the State of California to cause cancer or reproductive toxicity. The Act prohibits such businesses from releases of hazardous materials into the environment at levels above identified risk levels.

La Follette Bill of 1986 (Risk Management Plan)

Administered by the CUPA, the La Follette Bill requires preparation of a Risk Management Plan (RMP) for commercial operations, which use hazardous materials at defined thresholds. The RMP includes management, engineering and safety studies, and plans for physical improvements to minimize accidental hazardous materials releases. Implementation of the RMP occurs via fire inspections, plan checking, BEP/HMBP disclosure requirements, and filing of the RMP (updated every three years).

Uniform Fire Code

The Uniform Fire Code is administered by the CUPA via regular site inspections. The code regulates the type, configuration, and quantity of hazardous materials that may be stored within structures or in outdoor areas.

Local

Sonoma County Municipal Code

Hazardous Materials Management Ordinance of Sonoma County (Ord. No. 5015 § 1, 1997.) Chapter 29 was established to regulate the storage, handling, and management of hazardous materials, and grants authority to the County or CUPA with jurisdiction to administer and enforce applicable laws and regulations governing hazardous materials.

Sonoma County Fire and Emergency Services Department

The Hazardous Materials (HazMat) Division is the CUPA that enforces the regulatory-based Hazardous Materials Business Plan Program, Hazardous Waste Program, Underground Storage Tank Program, Aboveground Petroleum Storage Act, Accidental Release Program, and portions of the Uniform Fire Code that address hazardous materials. The HazMat Division prepares the Sonoma County Hazardous Materials Area Plan and the Offshore Oil Spill Plan for the County.

Sonoma County General Plan

The *Sonoma County General Plan 2020* (2008) contains various policies that encourage fire safe practices and implementation of federal, state and county hazardous materials laws and regulations.

4.12.4 Environmental Impacts and Mitigation Measures

Significance Criteria

The thresholds for determining the significance of impacts for this 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 associated with hazards and hazardous materials if it would:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
3. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

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.

1. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
2. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment; and
3. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area; and
4. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.
5. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

The Estuary Management Project area is not located on an agency-listed hazardous materials site, nor is it located within a high fire hazard zone area. The project area is not located within one quarter mile of any schools. Additionally, there are no airports within 15 miles of the project area. Therefore, impacts associated with hazardous materials sites, wildland fire hazards and aviation/airstrip safety are not addressed further.

Approach to Analysis

This analysis considers the proximity and status of hazardous sites relative to the Estuary, and the potential for project implementation to introduce new hazards to the environment. 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 hazards and hazardous materials are summarized and categorized as either “no impact,” “less than significant,” “less than significant with mitigation,” or “significant and unavoidable.”

Impact 4.12.1: Use of Hazardous Materials. The Estuary Management Project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (Less than Significant)

The Estuary Management Project includes the use of equipment to create a lagoon outlet channel and to conduct artificial breaching. The fuels, oils, and lubricants used in the equipment can be considered hazardous. However, the fuels, oils, and lubricants would not be placed on or in the outlet channel, nor in the Estuary as a part of the normal routine operations. Accidental releases of hazardous materials are addressed in the next potential impact below. Therefore, the potential hazard to the public or the environment would be less than significant.

Impact Significance: Less than Significant; no mitigation required.

Impact 4.12.2: Accidental Releases of Hazardous Materials. The Estuary Management Project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (Less than Significant with Mitigation)

Project activities include the use of earth-moving equipment, such as an excavator, or bulldozer, and trucks to transport work crews and equipment. These activities are similar to existing operations to breach the barrier beach. Maintenance and fueling of vehicles and equipment would occur outside of the project area. As discussed above, hazardous materials would not be used as a part of the project activities. However, equipment and trucks would contain fuels, oils, and lubricants and an accidental release of small quantities of these materials could occur. The occurrence of this type of spill can be minimized through the use of best management practices. In addition, this type of spill could be cleaned up according to regulations and would not create a significant hazard to the public or the environment. Therefore, there would be a less than significant impact associated with the proposed project after implementation of **Mitigation Measure 4.12-2**.

Mitigation Measures

Mitigation Measure 4.12-2: To minimize the potential for accidental spills from equipment and to provide for a planned response in the event that an accidental spill does occur, the Water Agency shall implement the following construction best management practices:

1. Prohibit on-site fueling of vehicles and construction equipment;
2. Maintain spill containment and clean up equipment onsite; and,
3. Ensure that construction personnel are trained in proper material handling, cleanup, and disposal procedures.

Impact Significance after Mitigation: Less than Significant.

Impact 4.12.3: Emergency Access. The Estuary Management Project could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Less than Significant)

Project activities could interfere with an adopted emergency response plan or emergency evacuation plan if activities involved the complete or partial closure of roadways, interfered with identified evacuation routes, otherwise restricted access for emergency response vehicles, or restricted access to critical facilities such as hospitals or fire stations. Project activities would occur within Goat Rock State Beach north of the beach parking lot at the end of Goat Rock Road. These activities will not close any roadways, affect identified evacuation routes, or restrict access for emergency vehicles. There would be a less than significant impact on emergency response and evacuation plans.

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

4.12.5 References

Sonoma County Permits and Resources Management Department, *Sonoma County General Plan 2020*, adopted September 23, 2008.

State Water Resources Control Board (SWRCB), Geotracker, Sites within 5 miles of Jenner CA, available online: <http://geotracker.waterboards.ca.gov/>, accessed on April 20, 2010.

CAL FIRE, Fire Hazard Severity Zone Map in State Responsibility areas, November 7, 2007. Available online: http://frap.cdf.ca.gov/webdata/maps/sonoma/fhszs_map.49.pdf, accessed on July 29, 2007.