3.11 Hazards and Hazardous Materials

3.11.1 Introduction

This section identifies the potential of hazards and hazardous materials, including wildfire hazards, within the Tier 1/Program EIS/EIR Study Area and evaluates the effects of associated with implementing the No Build Alternative and Build Alternative Options on these areas.

3.11.2 Regulatory Framework

In accordance with NEPA (42 USC Section 4321 et seq.), CEQ regulations implementing NEPA (40 CFR Parts 1501-1508), FRA's Procedures for Considering Environmental Impacts (64 FR 28545, May 26, 1999) and CEQA, FRA identified potential hazards and hazardous material sites within the Tier 1/Program EIS/EIR Study Area, and evaluated the potential effects and impacts that could occur from implementation of the Build Alternative Options.

Federal

The Comprehensive Environmental Response, Compensation, and Liability Act (42 United States Code Section 9601 et seq.)

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites; provides for liability of persons responsible for releases of hazardous waste at these sites; and establishes a trust fund to provide for cleanup when no responsible party can be identified.

Federal Occupational Safety and Health Act (29 United States Code Section 651 et seq.)

The Federal Occupational Safety and Health Act, which is implemented by the Occupational Safety and Health Administration, contains requirements, as set forth in Title 29 of the CFR, Part 1910, that are designed to promote worker safety, worker training, and a worker's right-to-know. Occupational Safety and Health Administration requirements would be in effect during construction and operation of the Project to ensure the safety of workers. Title 49 of the CFR requires that every employee who transports hazardous materials receive training to recognize and identify hazardous materials and become familiar with hazardous materials requirements.

National Weather Service

Under extreme fire weather conditions, the National Weather Service issues Red Flag warnings, as part of the National Fire Danger Rating System, which indicate a high risk of large-scale damaging wildfire. Red Flag warning criteria can vary depending upon location; however, the National Oceanic and Atmospheric Administration's general definition specifies that Red Flag criteria occur whenever a geographical area has been in a dry spell for longer than 1 week (or for a shorter period of time before spring green-up or after fall color); the National Fire Danger Rating System is high to extreme; and the following weather parameters are forecasted to be met: 1) a sustained wind average of 15 miles per hour or greater, 2) relative humidity less than or equal to 25 percent, and 3) a temperature of greater than 75 degrees Fahrenheit.

Resource Conservation and Recovery Act of 1976 (42 United States Code Section 6901 et seq.)

Under the Resource Conservation and Recovery Act of 1976 (RCRA), the U.S. EPA has the authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste by large-quantity generators (1,000 kilograms per month or more). Under the RCRA regulations, hazardous wastes must be tracked from the time of generation to the point of disposal. Additionally, all hazardous waste transporters are required to be permitted and must have an identification number. For California, the U.S. EPA has delegated RCRA enforcement to CalEPA, Department of Toxic Substances Control (DTSC).

Superfund Amendments and Reauthorization Act (Public Law 99-499)

CERCLA enlarged and reauthorized the Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499). The U.S. EPA compiles a list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the U.S. and its territories, known as the National Priorities List (NPL).

Toxic Substance Control Act (15 United States Code Section 2601 et seq.)

The Toxic Substance Control Act (TSCA) of 1976 provides U.S. EPA with authority to require reporting, record-keeping, testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. TSCA addresses the production, import, use, and disposal of specific chemicals, including polychlorinated biphenyls, asbestos, radon, and lead-based paint. The Frank R. Lautenberg Chemical Safety for the 21st Century Act was implemented on June 22, 2016, as an update to the TSCA.

United States Environmental Protection Agency

U.S. EPA Region 9 oversees federal environmental enforcement in the Pacific Southwest, including California, on issues relating to federal air, water, waste, pesticides, and toxics statutes.

Title IV of TSCA, as well as other regulations and authorities in the Residential Lead-Based Paint Hazard Reduction Act of 1992, directs U.S. EPA to regulate lead-based paint hazards. Under Section 112 of the FCAA, U.S. EPA is responsible for enforcing regulations relating to asbestos and demolition activities. Asbestos is regulated by 40 CFR Part 61, Subpart M – National Emission Standards for Hazardous Air Pollutants. The FCAA allows U.S. EPA to delegate this authority to state and local agencies.

State

CalEPA is responsible for the development, implementation, and enforcement of environmental laws that regulate air, water, and soil quality, pesticide use, and waste recycling and reduction in California. In many cases, the California state statute is more stringent than the federal regulation, and the state of California also regulates some materials that are not regulated by federal statutes. CalEPA and the SWRCB establish rules governing the use of hazardous materials and the management of hazardous waste. Applicable state and local laws include the following:

- Aboveground Petroleum Storage Tank Act
- Asbestos-Containing Material Regulations
- California Accidental Release Prevention Program
- Emergency Response to Hazardous Materials Incidents
- Hazardous Substances Information and Training Act
- Hazardous Waste Control Law
- Hazardous Waste Generator and on-site Hazardous Waste Treatment Programs (i.e., Tiered Permitting)
- Public Safety/Fire Regulations/Building Codes
- Safe Drinking Water and Toxic Enforcement Act
- TSCA
- Underground Storage of Hazardous Substances Act

Within CalEPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the state agency for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law.

California Strategic Fire Plan

The State Board of Forestry and Fire Protection prepared the 2018 Strategic Fire Plan with the goal of developing policies and programs that serve the public interest in environmentally, economically, and socially sustainable forest and rangeland management, and establishing a fire protection system that protects and serves the people of California. PRC Sections 4114 and 4130 outline the requirements of the plan (State Board of Forestry and Fire Protection 2018).

Fire Hazard Severity Zones

Government Code 51179, PRC Sections 4202 to 4204, and CCR Section 1280 outline requirements for state and local agencies to classify and map fire hazard severity zones. The California Department of Forestry and Fire Protection Director has authority to classify state responsibility area (SRA) lands for the fire hazard, establish zones reflecting degree of hazard severity, and periodically review and update fire hazard severity zone designations.

State Hazardous Waste Generator/Tiered Permitting Program (California Code of Regulations, Title 22, Division 4.5)

The State Hazardous Waste Generator/Tiered Permitting Program was set up for tracking the waste from cradle to grave. The hazardous waste generator has a responsibility for determining if their waste is hazardous and for the safe handling, transport, and disposal of that waste. Generators who handle hazardous wastes are inspected by the Certified Unified Program Agency for compliance with federal and state hazardous waste storage, and disposal regulations at least once every 3 years.

Unified Program Agencies for Hazardous Materials and Hazardous Waste Management (California Code of Regulations, Title 27, Division 1, Subdivision 4, Chapter 1, Sections 15100-15620)

The Unified Program required the administrative consolidation of six hazardous materials and waste programs (Program Elements) under one agency, a Certified Unified Program Agency. The Program Elements consolidated under the Unified Programs are: Tiered Permitting, Aboveground Petroleum Storage Tank Spill Prevention Control and Countermeasure Plan, Community-Right-To-Know, California Accidental Release Prevention, underground storage tank (UST), and Uniform Fire Code

Plans and Inventory Requirements. The Unified Program is intended to provide relief to businesses complying with the overlapping and sometimes conflicting requirements of formerly independently managed programs.

Regional

Los Angeles County General Plan

The Safety Element of the *Los Angeles County 2035 General Plan* (County of Los Angeles 2015) provides goals, objectives, policies, and programs related to hazards mitigation, emergency response, fire hazards, and disaster recovery. The Safety Element provides specifics as to selected urban rife and secondary hazards, such as oil fields, areas with known shallow methane accumulation, natural gas transmission and distribution lines, and areas with concentrations of post-1946 high-rise buildings (greater than eight stories).

Orange County General Plan

The Safety Element of the *Orange County General Plan* (Orange County 2005) provides goals, objectives, and policies related to hazardous materials, including response to emergency incidents, surveillance of hazardous materials and waste, and providing training to designated personnel. The Safety Element also includes goals, objectives, and policies for fire hazards.

County of Riverside General Plan

The Safety Element of the *County of Riverside General Plan* (County of Riverside 2003) includes goals and policies to reduce impacts of future disasters in the county, including fire hazards. The policies identified in the plan are intended to ensure that land use and siting decisions take hazardous water management and risk reduction into account and that proposed development incorporates fire prevention features.

County of San Bernardino General Plan

The Safety Element of the *County of San Bernardino General Plan* (County of San Bernardino 2014) identifies hazards and hazard abatement provisions to guide local decisions. The plan includes goals and polices to minimize potential risks resulting from exposure of county residents to natural and man-made hazards. The Safety Element establishes a coordinated program to condition development in wildland areas that was adopted through the Fire Safety Overlay provisions of the County Development Code. The Safety Element includes goals and policies to ensure emergency evacuation routes are identified and adequately accessible.

Local and Tribal Governments

Regulations from cities, local agencies, and tribal governments would be identified in the Tier 2/Project-level analysis once site-specific rail infrastructure improvements and station facilities are known.

3.11.3 Methods for Evaluating Environmental Effects

The methodology for this evaluation consists of using existing data to identify areas that have documented hazardous wastes, petroleum products, known contamination, or that are within a potential hazard area (e.g., fire severity zone, airport zone) within the Tier 1/Program EIS/EIR Study Area. Utilizing existing data, the potential level of effect is evaluated for each Build Alternative Option.

No comprehensive source of information is available which identifies known or potential sources of environmental contamination. ASTM International (ASTM) Practice E1527-13 (Standard Practice for Environmental Site Assessments) is the accepted industry standard used to evaluate properties for the presence of contamination. U.S. EPA also recognizes the ASTM E1527-13 standard as an adequate investigative process to meet the All Appropriate Inquiry standard for CERCLA liability protections. However, because the methodology used is at the Tier 1/Program-level analysis, the evaluation herein would not meet either the ASTM E 1527-13 protocol or the U.S. EPA All Appropriate Inquiry standard. A detailed evaluation using these protocols and standards would be completed during Tier 2/Project-level NEPA and CEQA analyses.

For this service-level evaluation, the estimated number and distance of state response sites, landfill sites, USTs, and leaking underground storage tanks (LUST) from each Build Alternative Option were compared.

For fire hazard zones, California Department of Forestry and Fire Protection Statewide Fire Hazard Severity Zone Maps for SRA and local responsibility areas (LRA) and SRAs were reviewed and GIS overlays were created. For airports and airport influence areas, data from each county's Airport Land Use Commission (ALUC) mapping was reviewed to create GIS overlays. For educational facilities, publicly available GIS data from each county was reviewed.

Tier 1/Program EIS/EIR Study Area

This service-level evaluation is limited to a desktop evaluation of the data sources described in Section 3.11.3. The Tier 1/Program EIS/EIR Study Area was combined with GIS overlays to identify potential hazards and hazardous materials sites that could be affected by the Program. These potential areas were identified on a broad scale using available mapping information. A detailed

description of the Tier 1/Program EIS/EIR Study Area is provided in Section 3.1, Introduction to Environmental Analysis.

Data Sources

Online GIS data available from the U.S. EPA (U.S. EPA 2018c), CalEPA (CalEPA 2018), and a variety of other sources were used to identify areas containing potential hazards or hazardous materials within the Tier 1/Program EIS/EIR Study Area. Specifically, the following resources were reviewed:

- **Assessment Cleanup and Redevelopment Exchange System**: Stores information reported by U.E. EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding, as well as information on Targeted Brownfields Assessments performed by U.S. EPA Regions. A listing of Assessment Cleanup and Redevelopment Exchange System Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to U.S. EPA, as well as areas served by Brownfields grant programs.
- **Superfund Enterprise Management System**: Formerly known as Comprehensive Environmental Response, Compensation and Liability Information System, renamed to Superfund Enterprise Management System by the U.S. EPA in 2015, this list contains data on potentially hazardous waste sites that have been reported to the U.S. EPA by states, municipalities, private companies, and private persons, pursuant to Section 103 of the CERCLA.
- **NPL**: Also referred to as Superfund, the NPL is a subset of Comprehensive Environmental Response, Compensation and Liability Information System and identifies over 1,200 sites for priority cleanup under the Superfund Program.
- **RCRA Information System**: RCRA Information System is U.S. EPA's comprehensive information system, providing access to data supporting the RCRA of 1976 and the Hazardous and Solid Waste Amendments of 1984. The database includes selective information on sites which generate, transport, store, treat, and/or dispose of hazardous waste as defined by the RCRA.
- **Toxic Release Inventory**: A federal database that contains detailed information on nearly 650 chemicals and chemical categories that over 1,600 industrial and other facilities in the state manage through disposal or other releases, recycling, energy recovery, or treatment.

- **TSCA**: TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.
- **California Environmental Reporting System**: Developed by CalEPA to support the reporting of information by regulated businesses and Certified Unified Program Agencies pertaining to hazardous materials and hazardous waste throughout the state.
- **EnviroStor**: This system is used by the DTSC to track permitting, enforcement, and cleanup activities at hazardous waste facilities and sites with known or suspected contamination.
- **Geotracker**: Developed for SWRCB, this database contains information about impacted groundwater sites within the state, such as LUST, cleanup sites, and permitted facilities such as landfills and operating UST facilities.
- **California Fire Hazard Severity Zone Viewer.** Database that designates zones (based on factors such as fuel, slope, and fire weather) within an area.

Known sites are a subset of sites of concern that exist along any corridor. All locations of environmental contamination cannot be captured and catalogued by an environmental program.

Related Resources

There are no related resources that would contribute to the assessment of Tier 1/Program EIS/EIR effects on hazards and hazardous materials.

3.11.4 Affected Environment

The Program Corridor crosses a large geographic area within Southern California, spanning approximately 144 miles from its western terminus in Los Angeles to its eastern terminus in Coachella. The Program Corridor occurs within an existing railroad corridor that traverses areas that have predominately been heavily modified for urban purposes, especially in the Western Section, although some areas occur in or adjacent to lands that are undeveloped or contain natural vegetation. Much of the Program Corridor from Los Angeles to Redlands is urbanized. The Eastern Section of the Program Corridor is less urbanized with vacant land comprising of the largest land use category within the Tier 1/Program EIS/EIR Study Area.

Hazardous Waste and Material Sites

Hazardous wastes are defined as any waste product that is considered flammable, corrosive, reactive, or toxic (40 CFR Part 261.3). Hazardous wastes take on many different forms and may

originate from a variety of sources. Common sites associated with contamination include, but are not limited to, gas stations, motor repair facilities, dry cleaners, heavy industry, and railroad corridors.

Certain listings relating to hazardous materials and wastes or known contaminated properties are considered to be of greater concern to the Program than other hazardous material sites. In general, Superfund, Brownfields, and LUST listings (in order of magnitude) are more likely to affect the Program, since they often encompass a broad area compared with other listed sites.
Figure 3.11-1 depicts the location of hazardous waste sites (including both federal listings from U.S. EPA and state listings from CalEPA) within the Tier 1/Program EIS/EIR Study Area.

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Figure 3.11-1. Hazardous Waste and Materials Sites within the Tier 1/Program EIS/EIR Study Area

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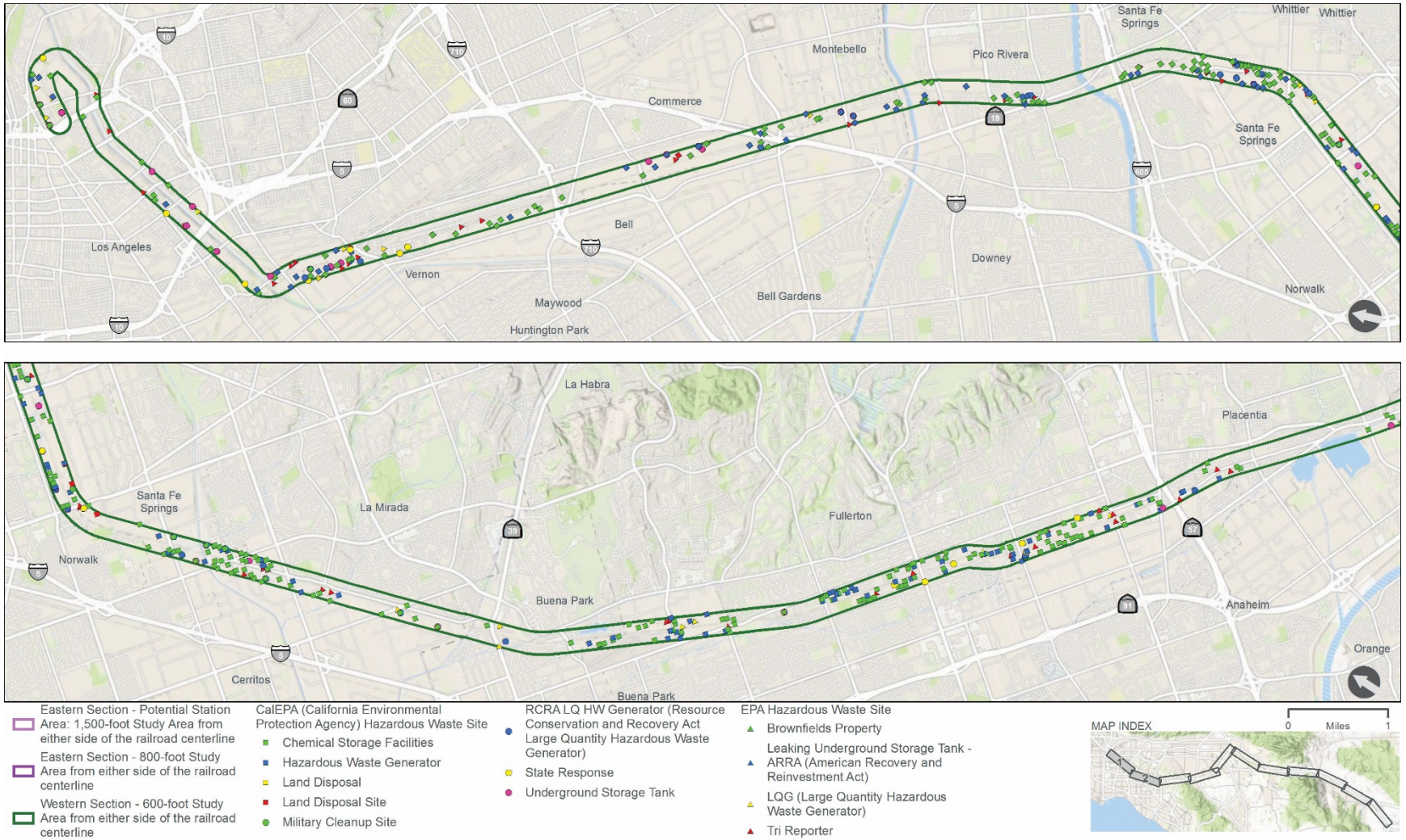

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Figure 3.11-1. Hazardous Waste and Materials Sites within the Tier 1/Program EIS/EIR Study Area

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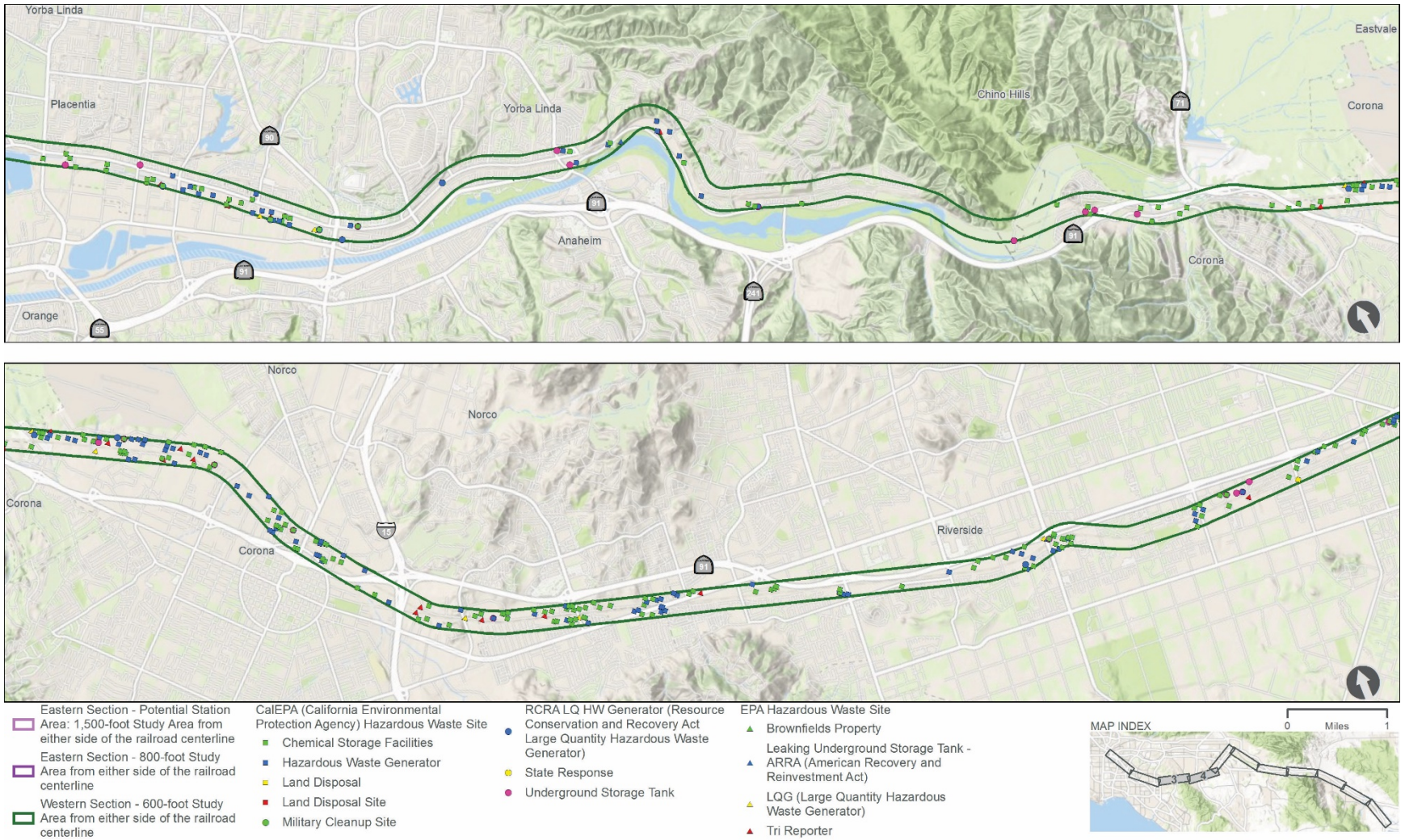

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Figure 3.11-1. Hazardous Waste and Materials Sites within the Tier 1/Program EIS/EIR Study Area

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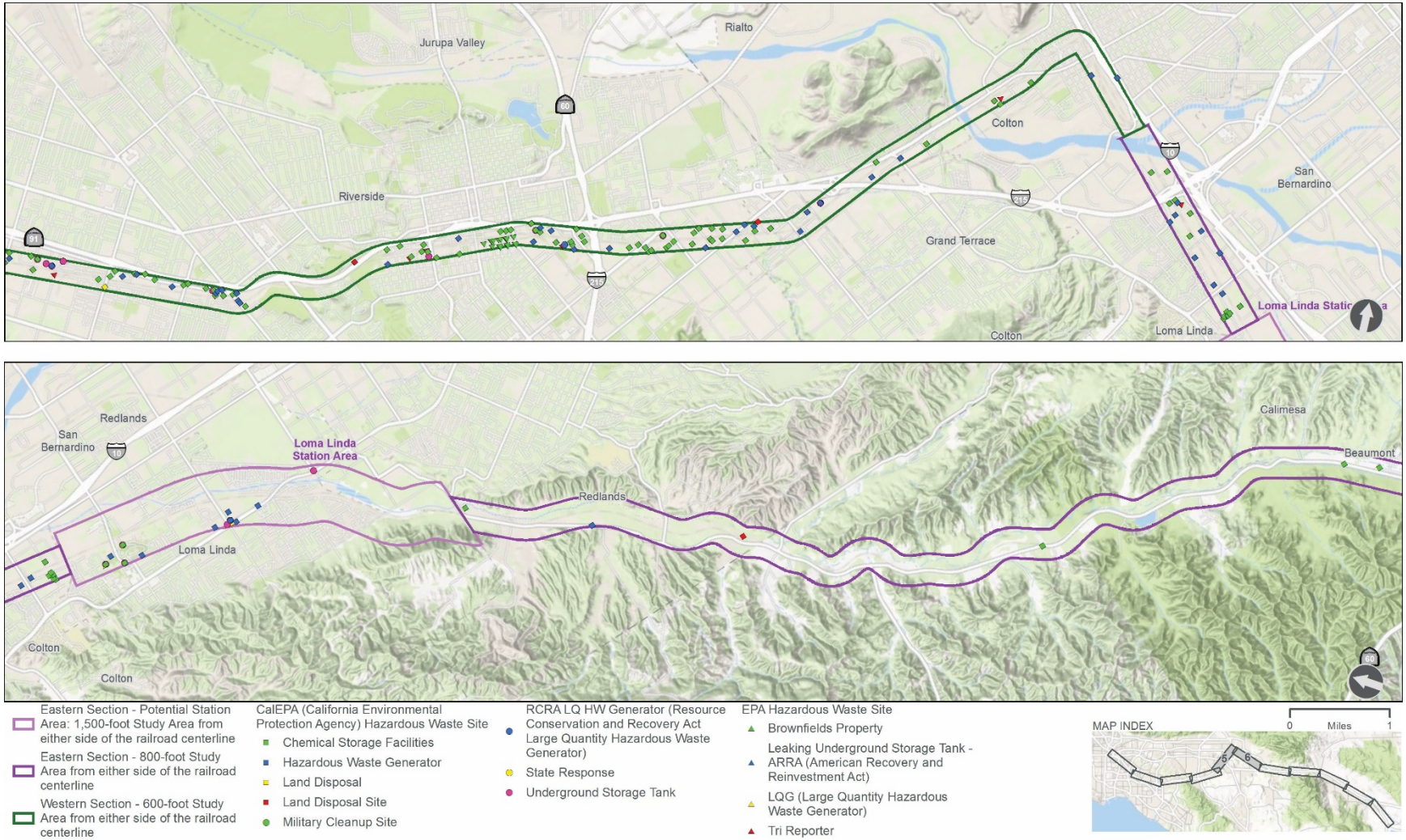

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Figure 3.11-1. Hazardous Waste and Materials Sites within the Tier 1/Program EIS/EIR Study Area

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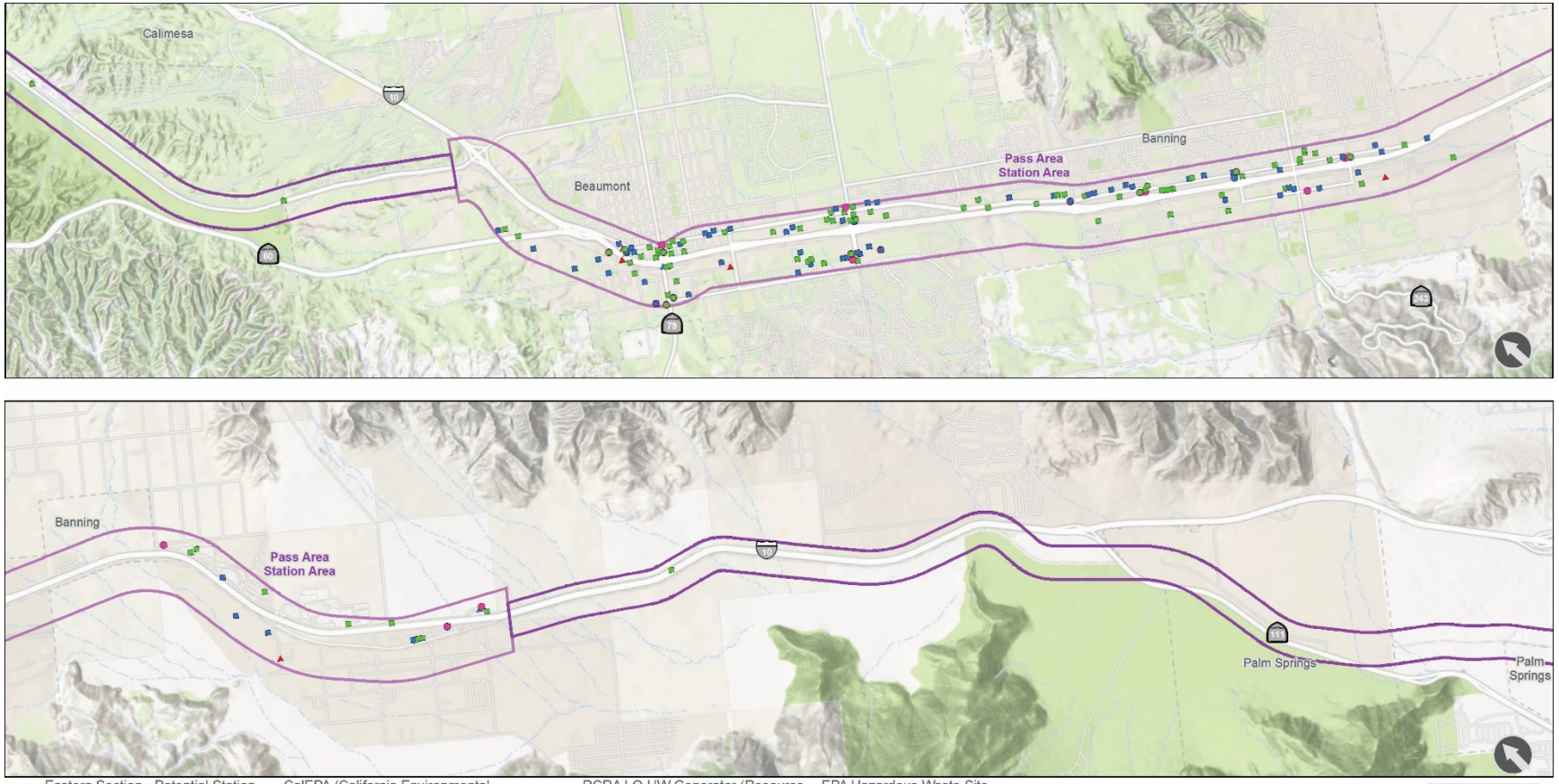

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Figure 3.11-1. Hazardous Waste and Materials Sites within the Tier 1/Program EIS/EIR Study Area

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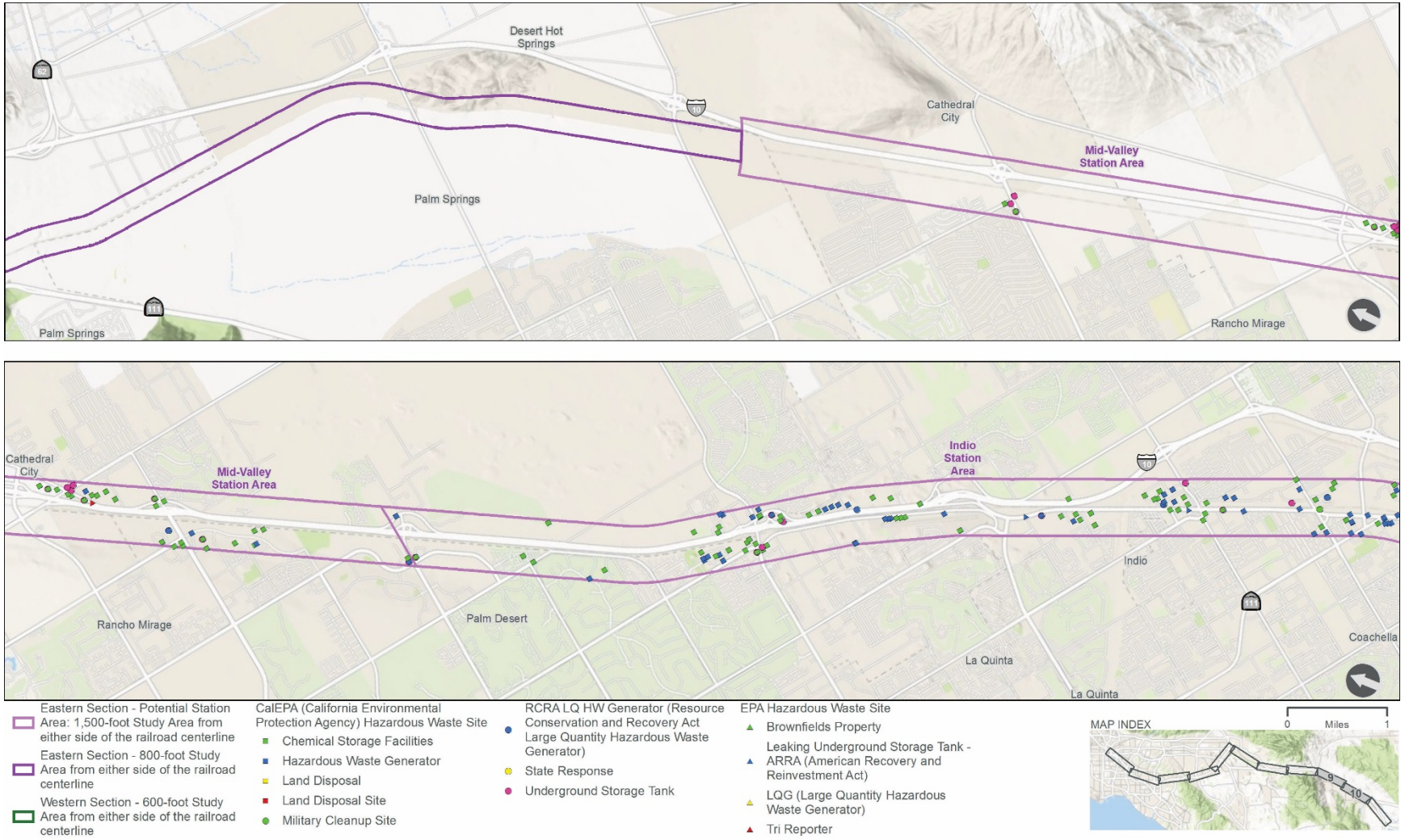

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Figure 3.11-1. Hazardous Waste and Materials Sites within the Tier 1/Program EIS/EIR Study Area

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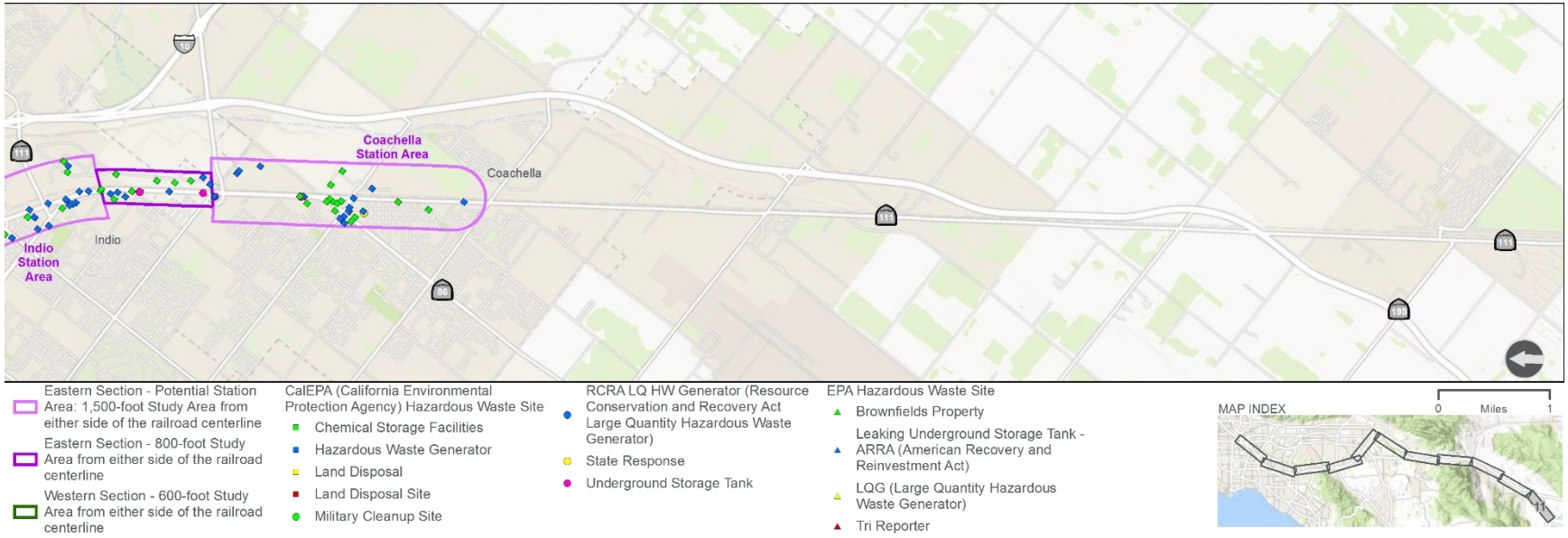

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Build Alternative Option 1 (Coachella Terminus)

Table 3.11-1 provides a summary of sites listed on a hazardous waste or materials regulatory database within Build Alternative Option 1.

Table 3.11-1. Summary of Regulatory Database Listings (Build Alternative Option 1)

Database	Number of Listings Identified (Western Section)[a]	Number of Listings Identified (Eastern Section)[a]	Total Number of Listings [a]
Federal Listings (U.S. EPA)			
NPL (Superfund)	0	0	**0**
Superfund Enterprise Management System (Comprehensive Environmental Response, Compensation and Liability Information System)	0	0	**0**
Brownfields	22	0	**22**
RCRA Large Quantity Generator	53	15	**68**
Toxic Release Inventory	83	8	**91**
TSCA	0	0	**0**
LUST-American Recovery and Reinvestment Act	2	5	**7**
State Listings (CalEPA)			
State Response (State Superfund Equivalent)	15	1	**16**
Military Cleanup	0	0	**0**
Land Disposal Sites	7	1	**8**
LUST	0	0	**0**
Chemical Storage Facilities	773	363	**1,136**
Hazardous Waste Generators	501	284	**785**

Database	Number of Listings Identified (Western Section)[a]	Number of Listings Identified (Eastern Section)[a]	Total Number of Listings [a]
UST	52	51	**103**
Large Quantity Generator	36	10	**46**
Total	**1,544**	**738**	**2,282**

Source: CalEPA 2018; U.S. EPA 2018

Notes:

[a] The number of listings does not represent unique properties. Some properties may contain multiple listings in multiple databases.

CalEPA=California Environmental Protection Agency; LUST=leaking underground storage tank; NPL=National Priorities List; RCRA=Resource Conservation and Recovery Act; TSCA=Toxic Substance Control Act; UST=underground storage tank

As summarized in Table 3.11-1, a total of 2,282 regulatory database listings were identified within Build Alternative Option 1. The total number of listings does not represent the number of unique locations, since a single property may have multiple listings in one or more categories. The majority of the listings were sites identified as chemical storage facilities and hazardous waste sites. These sites may or may not be associated with documented contamination, but they all have the potential to affect human health and the environment should a release of substantial quantity occur.

Build Alternative Option 2 (Indio Terminus)

Table 3.11-2 provides a summary of sites listed on a hazardous waste or materials regulatory database within Build Alternative Option 2.

Table 3.11-2. Summary of Regulatory Database Listings (Build Alternative Options 2 and 3)

Database	Number of Listings Identified (Western Section)[a]	Number of Listings Identified (Eastern Section)[a]	Total Number of Listings [a]
Federal Listings (U.S. EPA)			
NPL (Superfund)	0	0	**0**
Superfund Enterprise Management System (Comprehensive Environmental Response, Compensation and Liability Information System)	0	0	**0**

Database	Number of Listings Identified (Western Section)[a]	Number of Listings Identified (Eastern Section)[a]	Total Number of Listings [a]
Brownfields	22	0	**22**
RCRA Large Quantity Generator	53	12	**65**
Toxic Release Inventory	83	8	**91**
TSCA	0	0	**0**
LUST-American Recovery and Reinvestment Act	2	4	**6**
State Listings (CalEPA)			
State Response (State Superfund Equivalent)	15	0	**15**
Military Cleanup	0	0	**0**
Land Disposal Sites	7	1	**8**
LUST	0	0	**0**
Chemical Storage Facilities	773	326	**1,099**
Hazardous Waste Generators	501	251	**752**
UST	52	47	**99**
Large Quantity Generator	36	10	**46**
Total	**1,544**	**659**	**2,203**

Source: CalEPA 2018; U.S. EPA 2018

Notes:

[a] The number of listings does not represent unique properties. Some properties may contain multiple listings in multiple databases.

CalEPA=California Environmental Protection Agency; LUST=leaking underground storage tank; NPL=National Priorities List; RCRA=Resource Conservation and Recovery Act; TSCA=Toxic Substance Control Act; UST=underground storage tank

As summarized in Table 3.11-2, a total of 2,203 regulatory database listings were identified within Build Alternative Option 2. Similar to Build Alternative Option 1, the total number of listings does not represent the number of unique locations, since a single property may have multiple listings in one

or more categories. The majority of the listings were sites identified as chemical storage facilities and hazardous waste sites. These sites may or may not be associated with documented contamination, but they all have the potential to affect human health and the environment should a release of substantial quantity occur.

Build Alternative Option 3 (Indio Terminus with Limited Third Track)

Hazardous waste and materials sites within Build Alternative Option 3 are the same as Build Alternative Option 2.

Fire Hazard Severity Zones

California Department of Forestry and Fire Protection uses fire hazard severity zones to classify the anticipated fire-related hazard for SRAs and LRAs. The classifications include Non-Wildland Non-Urban, Moderate, High, and Very High. Fire hazard measurements take into account the following elements: vegetation, topography, weather, crown fire production, and ember production and movement. The very high fire hazard severity designation can be attributed to a variety of factors including highly flammable, dense, drought adapted desert chaparral vegetation, seasonal, strong winds, and a Mediterranean climate that results in vegetation drying during the months most likely to experience Santa Ana winds.

Southern California's climate has a large influence on fire risk as drying vegetation during the summer months becomes fuel available to advancing flames should an ignition be realized. Typically, the highest fire danger is produced by the high-pressure systems that occur in the Great Basin, which result in the Santa Ana winds of Southern California. Sustained wind speeds recorded during recent major fires exceeded 30 mph and may exceed 50 mph during extreme conditions. The Santa Ana wind conditions are a reversal of the prevailing southwesterly winds that usually occur on a region-wide basis during late summer and early fall. Santa Ana winds are warm and dry winds that flow from the higher desert elevations in the north through the mountain passes and canyons. As they converge through the canyons, their velocities increase. Consequently, peak velocities are highest at the mouths of canyons and dissipate as they spread across valley floors. Santa Ana winds generally coincide with the regional drought period and the period of highest fire danger. The Program Corridor is affected by Santa Ana winds. In general, portions of the Program Corridor have terrain that is favorable to wildfire spread, including steep slopes, ravines, mountains, and valleys.

As shown on Figure 3.11-2, the Tier 1/Program EIS/EIR Study Area traverses multiple fire hazard severity zones. Portions of the Western Section of the Program Corridor traverse a Very High Fire Hazard Severity Zone near the Orange County and Riverside County border and in San Bernardino County south of Colton and a Moderate Fire Hazard Severity Zone west of Corona. Portions of the Eastern Section of the Program Corridor traverses a Very High Fire Hazard Severity Zone in San Bernardino County and multiple Very High and Moderate Fire Hazard Severity Zones through the San Gorgonio Pass.

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Figure 3.11-2. Fire Hazard and Airport Zones within the Tier 1/Program EIS/EIR Study Area

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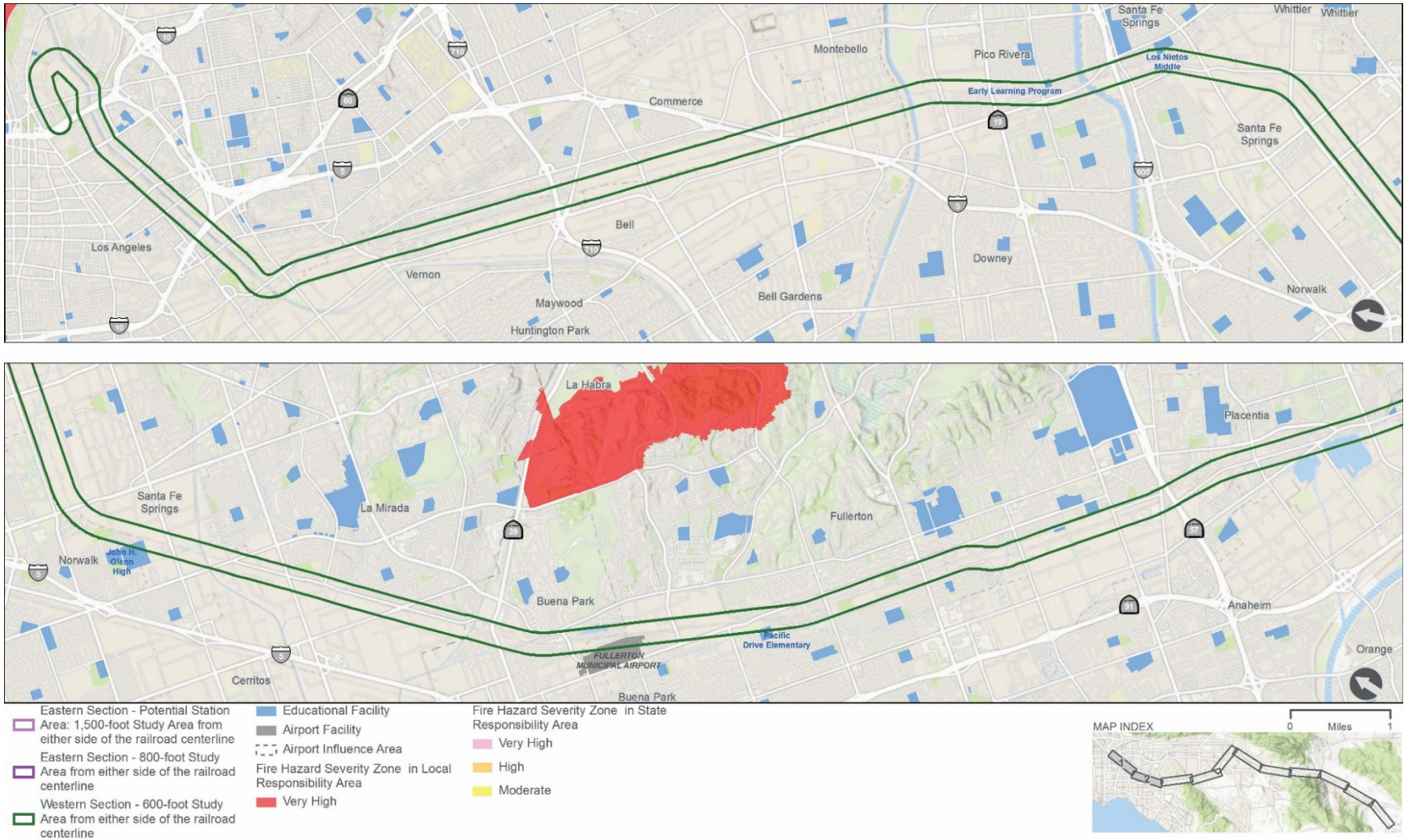

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Figure 3.11-2. Fire Hazard and Airport Zones within the Tier 1/Program EIS/EIR Study Area

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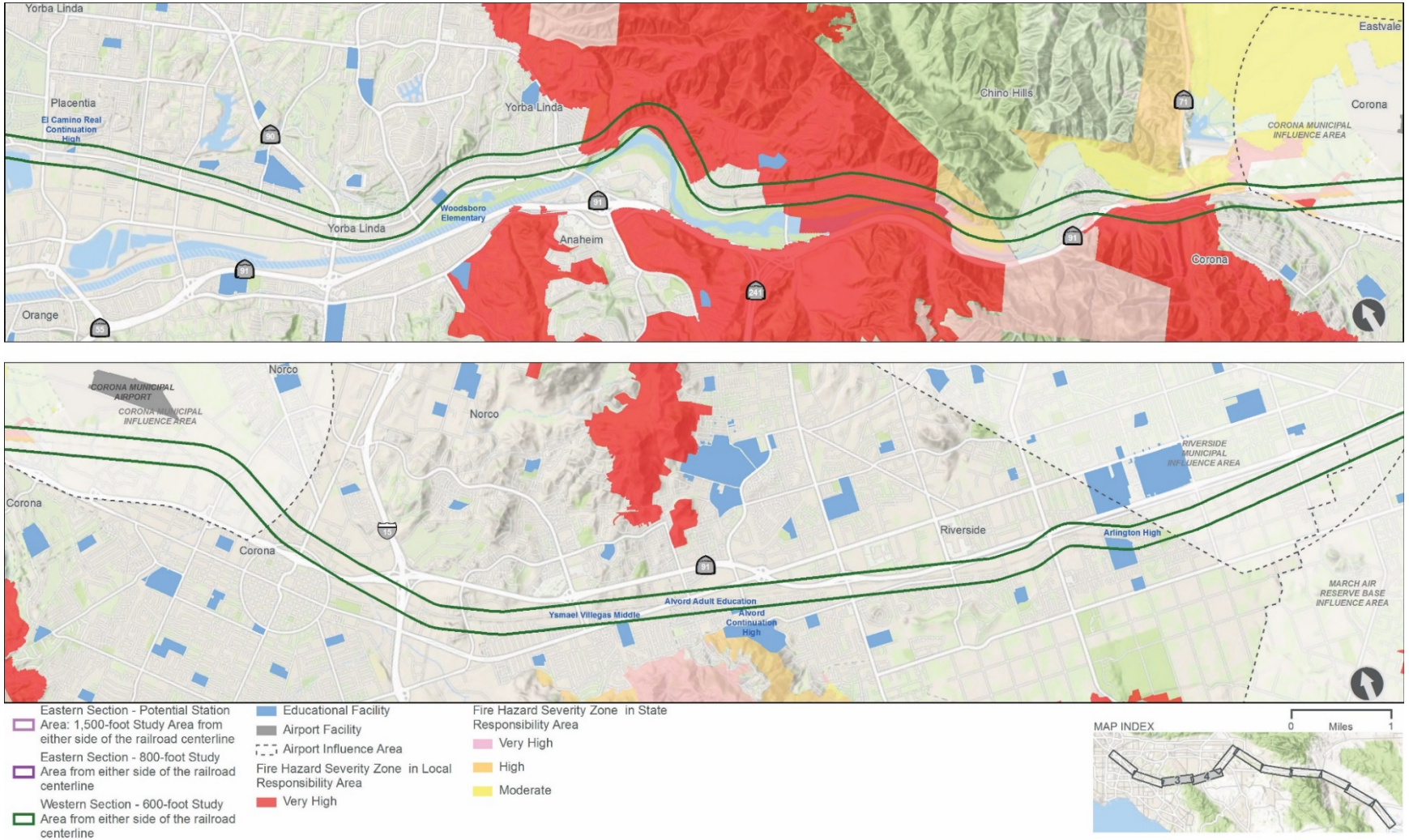

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Figure 3.11-2. Fire Hazard and Airport Zones within the Tier 1/Program EIS/EIR Study Area

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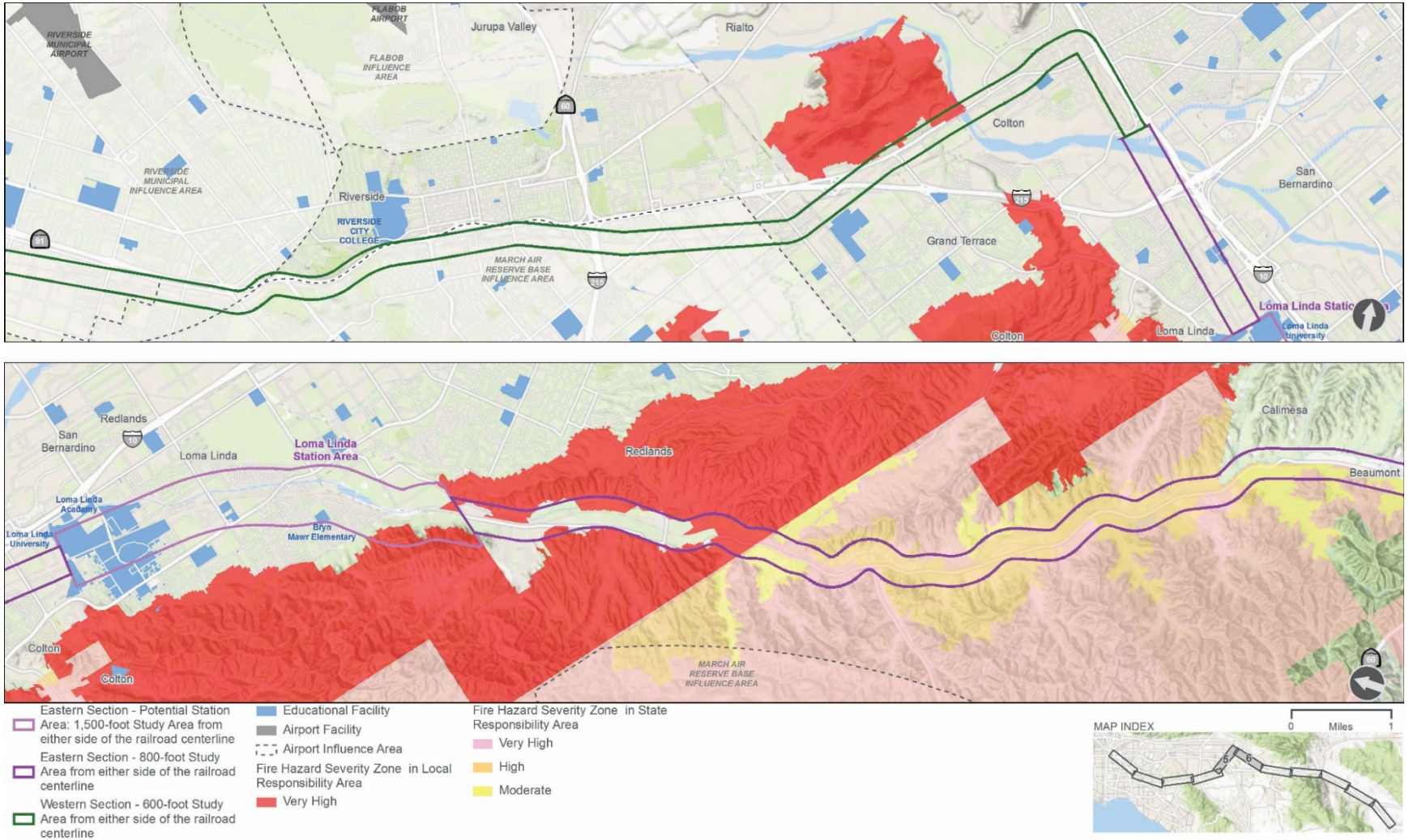

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Figure 3.11-2. Fire Hazard and Airport Zones within the Tier 1/Program EIS/EIR Study Area

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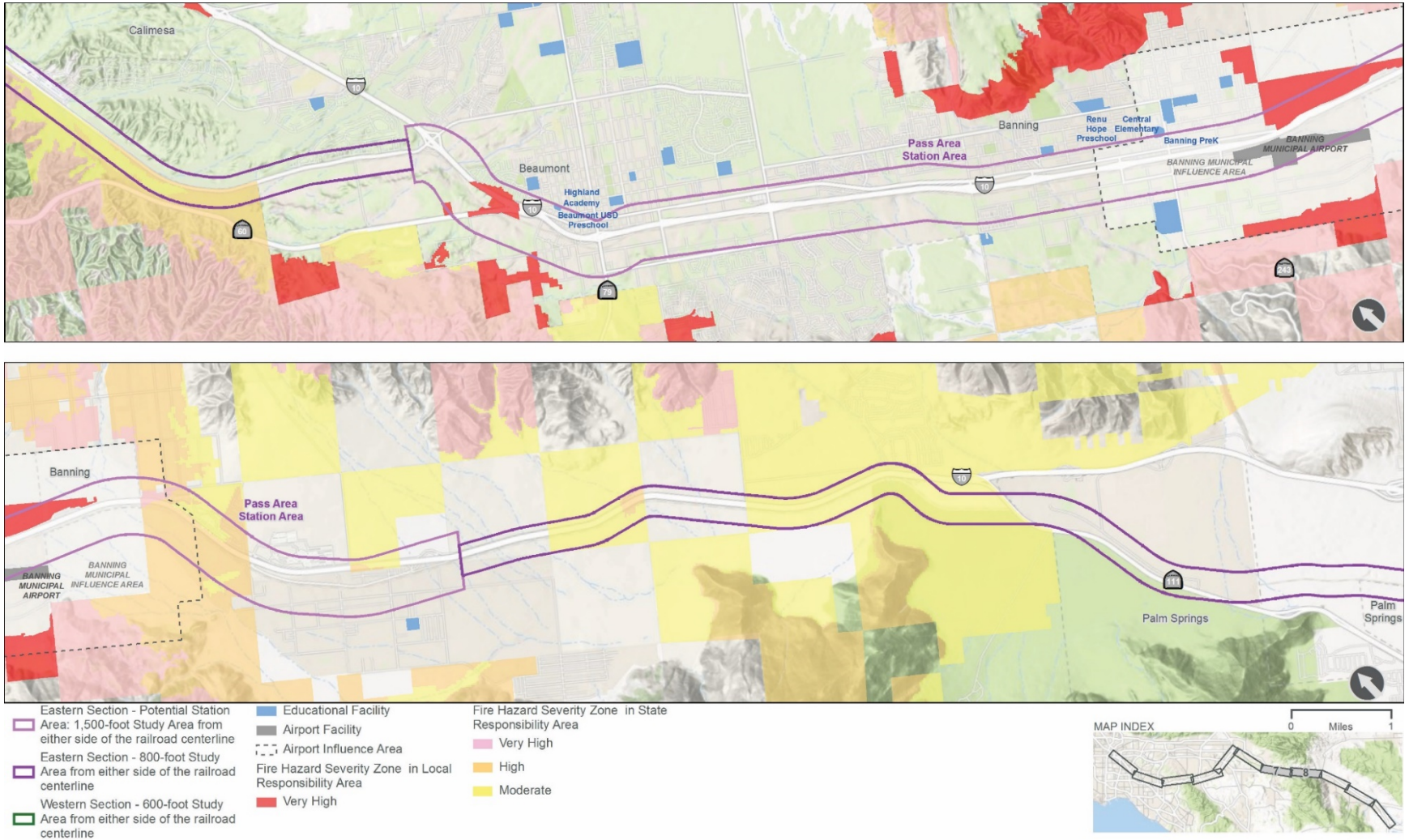

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Figure 3.11-2. Fire Hazard and Airport Zones within the Tier 1/Program EIS/EIR Study Area

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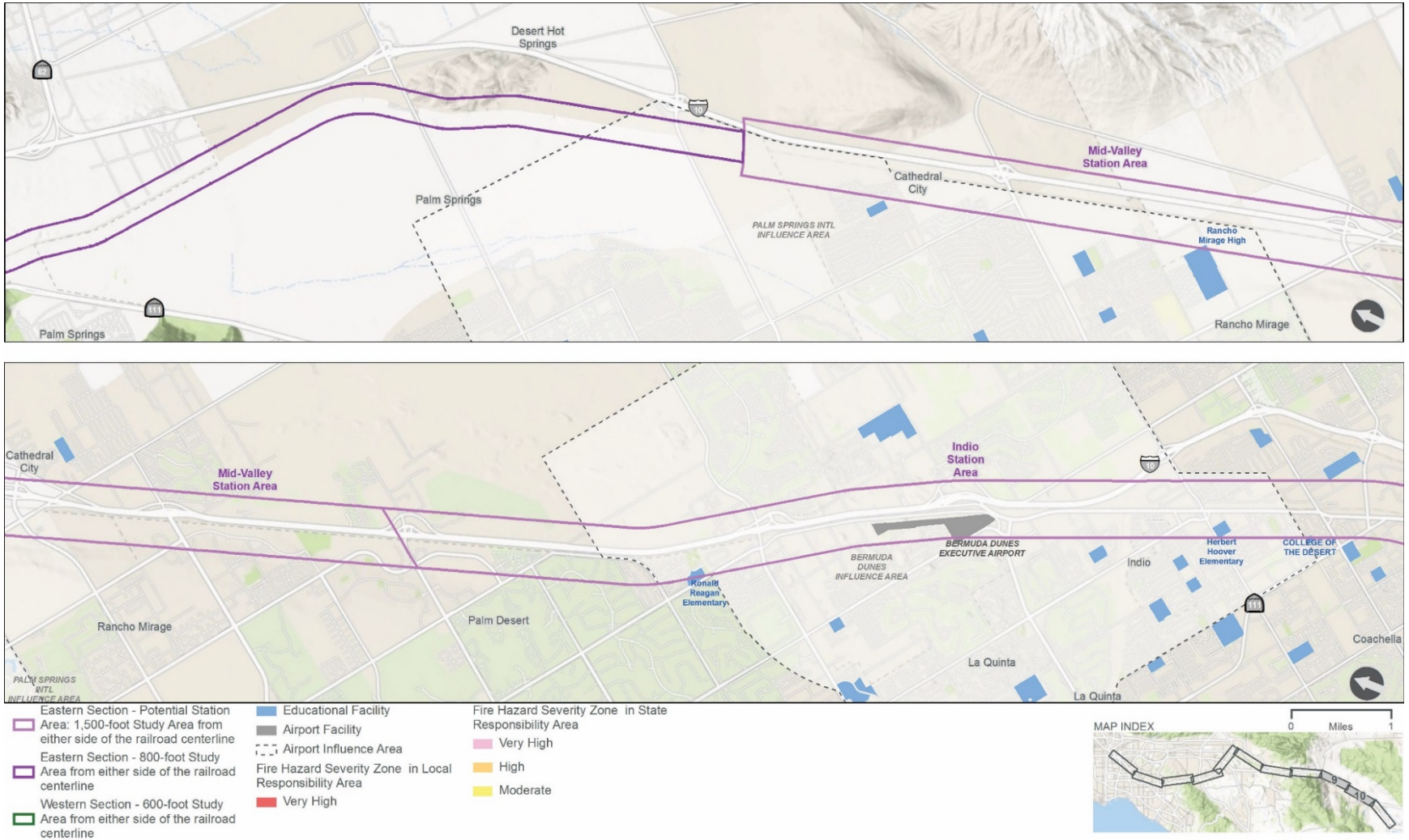

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Figure 3.11-2. Fire Hazard and Airport Zones within the Tier 1/Program EIS/EIR Study Area

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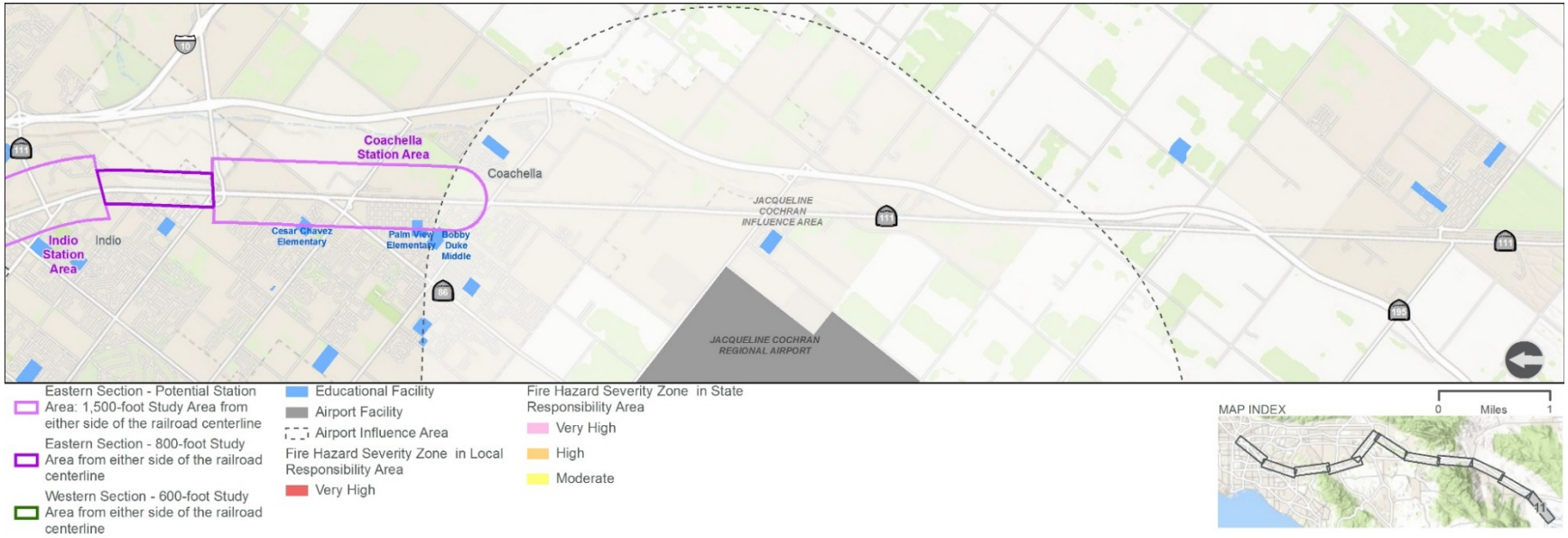

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Build Alternative Option 1 (Coachella Terminus)

There are limited areas within the Western Section of Build Alternative Option 1 that are mapped as being within a fire hazard severity zone. Of the land mapped as being within a fire hazard severity zone, the largest is mapped as SRA High (114.0 acres). Other land mapped as SRA Very High and LRA Very High are also present within the Western Section. For the Eastern Section of Build Alternative Option 1, the largest type of fire hazard severity mapped land is mapped as SRA High (1,256.6 acres). Similar to the Western Section, other land mapped as SRA Very High, SRA Moderate, and LRA Very High are also present within the Eastern Section. Table 3.11-3 provides a summary of fire hazard severity zones within Build Alternative Option 1.

Table 3.11-3. Summary of Fire Hazard Severity Zones (Build Alternative Options 1, 2, and 3)

Fire Hazard Severity Zone	Area of Zone within Western Section (acres)	Area of Zone within Eastern Section (acres)	Total Area of Zone (acres)
SRA – Very High	75.7	306.9	**382.6**
SRA – High	114.0	1,256.6	**1,370.6**
SRA – Moderate	0.0	1,151.7	**1,151.7**
LRA – Very High	617.1	562.7	**1,179.8**

Source: California Department of Forestry and Fire Protection 2012

Notes:

LRA=local responsibility area; SRA=state responsibility area

Build Alternative Option 2 (Indio Terminus)

Fire hazard severity zones within Build Alternative Option 2 are the same as Build Alternative Option 1.

Build Alternative Option 3 (Indio Terminus with Limited Third Track)

Fire hazard severity zones within Build Alternative Option 3 are the same as Build Alternative Option 1.

Airports and Airport Influence Areas

Within California, airport land use compatibility is coordinated by an ALUC. ALUCs protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land

use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports. An Airport Land Use Compatibility Plan (ALUCP) is the basis for compatible planning within the vicinity of a public airport. The ALUCP may include land use measures specifying land use, height restrictions, and building standards. The planning boundary of the ALUCP is the airport influence area and is established by the ALUC after consultation with the involved agencies. Involved agencies are primarily the cities and the county, but also include special districts, school districts, and community college districts. An ALUCP must also address any military airport within the jurisdiction of the ALUC.

The Program Corridor crosses four counties, Los Angeles, Orange, San Bernardino, and Riverside, with each county having an ALUC that establishes land use, noise, and safety policies for projects in the vicinity of public airports, including compatibility criteria and maps for the influence areas of individual airports.

Build Alternative Option 1 (Coachella Terminus)

As shown on Figure 3.11-2, portions of the Western Section under Build Alternative Option 1 are located within 3 airport facility influence areas and adjacent to 1 airport facility:

- Fullerton Municipal Airport
- Corona Municipal Airport Influence Area
- Riverside Municipal Airport Influence Area
- March Air Reserve Base Airport Influence Area

As shown on Figure 3.11-2, portions of the Eastern Section under Build Alternative Option 1 are located within 4 airport facility influence areas and adjacent to 2 airport facilities:

- Banning Municipal Airport and Banning Municipal Airport Influence Area
- Palm Springs International Airport Influence Area
- Bermuda Dunes Executive Airport and Bermuda Dunes Executive Airport Influence Area
- Jacqueline Cochran Regional Airport Influence Area

Build Alternative Option 2 (Indio Terminus)

Airports and airport influence areas for the Western Section within Build Alternative Option 2 are the same as Build Alternative Option 1. As shown on Figure 3.11-2, portions of the Eastern Section under Build Alternative Option 2 are located within three airport facility influence areas and adjacent to two airport facilities:

- Banning Municipal Airport and Banning Municipal Airport Influence Area
- Palm Springs International Airport Influence Area
- Bermuda Dunes Executive Airport and Bermuda Dunes Executive Airport Influence Area

Build Alternative Option 3 (Indio Terminus with Limited Third Track)

Airports and airport influence areas within Build Alternative Option 3 are the same as Build Alternative Option 2.

Educational Facilities

School locations are important to consider because individuals particularly sensitive to hazardous materials exposure use these facilities. Additional protective regulations apply to projects that could use or disturb potentially hazardous products near or at schools. The California Public Resources Code requires projects that might reasonably be expected to emit or handle hazardous materials within 0.25 mile of a school to discuss potential effects with the applicable school district. Figure 3.11-2 shows existing educational facilities (defined as colleges, high schools, middle schools, elementary schools, preschools, or nursery schools) within the Tier 1/Program EIS/EIR Study Area.

Build Alternative Option 1 (Coachella Terminus)

Table 3.11-4 provides a summary of education facilities within Build Alternative Option 1.

Table 3.11-4. Summary of School Facilities (Build Alternative Option 1)

Educational Facility	Number of Facilities (Western Section)	Number of Facilities (Eastern Section)	Total Number of Education Facilities
Preschool/Nursery School	1	1	**2**
Elementary School	2	6	**8**
Middle School	2	1	**3**

Educational Facility	Number of Facilities (Western Section)	Number of Facilities (Eastern Section)	Total Number of Education Facilities
High School	3	1	**4**
College/University	1	2	**3**
Other (Adult Education)	3	3	**6**

Build Alternative Option 2 (Indio Terminus)

Table 3.11-5 provides a summary of education facilities within Build Alternative Option 2 and 3.

Table 3.11-5. Summary of School Facilities (Build Alternative Options 2 and 3)

Educational Facility	Number of Facilities (Western Section)	Number of Facilities (Eastern Section)	Total Number of Education Facilities
Preschool/Nursery School	1	1	**2**
Elementary School	2	4	**6**
Middle School	2	0	**2**
High School	3	1	**4**
College/University	1	2	**3**
Other (Adult Education)	3	3	**6**

Build Alternative Option 3 (Indio Terminus with Limited Third Track)

School facilities located within Build Alternative Option 3 are the same as Build Alternative Option 2.

3.11.5 Environmental Consequences

Overview

Effects as a result of implementing the Build Alternative Options can be broadly classified into construction and operational effects. Long-term or permanent effects and short-term or temporary effects related to hazards and hazardous materials would be anticipated as a result of constructing any of the Build Alternative Options.

Most effects related to hazards and hazardous materials would occur during construction when the ground is disturbed and when there could be temporary disturbance of hazardous materials.

Operation or long-term effects would include the additional hazardous waste, contaminated materials, and solid waste that are generated by the operation of the Program, including from hazardous wastes handled at existing maintenance facilities as a part of routine operation and maintenance of passenger trains, and from minor spills and releases of non-acutely hazardous waste.

No Build Alternative

The No Build Alternative, as described in Chapter 2, Program Alternatives, of this Tier 1/Program EIS/EIR, is used as the baseline for comparison. The No Build Alternative would not implement the Program of rail improvements associated with this service-level evaluation. Because no physical changes would occur, no effects related to hazards and hazardous materials and wildfire conditions are anticipated under the No Build Alternative.

Build Alternative Options 1, 2, and 3

Hazardous Materials Sites and Hazardous Materials Effects

CONSTRUCTION

Western Section. The Build Alternative Options would not require construction of additional rail or station infrastructure in the Western Section of the Program Corridor because the existing railroad and stations from LAUS to Colton would be used. When compared with the No Build Alternative, short-term/temporary effects associated with the handling of potential hazardous materials would be negligible because no additional construction activities are planned within the Western Section under Build Alternative Options 1, 2, and 3.

Eastern Section. A total of 51 UST and 2 American Recovery and Reinvestment Act database listings have been identified within the Eastern Section of Build Alternative Option 1. A total of 47 UST and 2 American Recovery and Reinvestment Act database listings have been identified within the Eastern Section of Build Alternative Option 2 and 3. Construction activities under the Build Alternative Options involving excavation increase the likelihood for encountering existing and unknown regulated materials. Hazardous material sites pose a safety risk to workers who might be exposed to contaminated soil, water, and vapors. In addition, vehicles and equipment used during construction activities, such as fuel storage tanks, have the potential to release hazardous materials (mainly petroleum products) and increase material spills. There is also the potential for an increase in hazardous conditions through the movement or dispersion of hazardous materials on site during construction.

Although construction activities could increase the potential for use, release, and exposure to hazardous materials or hazardous conditions, appropriate construction safety procedures and equipment stockpiling methods would be used to minimize the potential for unintended releases with all releases reported and addressed under appropriate regulatory guidance. Should contamination be encountered, construction activities would be temporarily halted until characterization, storage, disposal, and cleanup requirements are met.

If a passenger rail system is constructed and operated within the existing rail ROW, no ROW acquisitions would be required. However, the Tier 1/Program EIS/EIR Study Area allows for infrastructure and station facilities to be located beyond the limits of the existing rail ROW, which would require acquisition of land that is identified on a hazardous waste and materials regulatory database and be potentially contaminated. Which properties would be affected by the future construction and operation of a passenger rail system, and to what extent, cannot be determined at this time.

Therefore, this Tier 1/Program EIS/EIR evaluation does not identify the nature and severity of contamination at specific sites because the sites for where infrastructure and station improvements would be constructed have not yet been selected. The Tier 2/Project-level analysis would evaluate site specific impacts associated with hazardous waste and material sites, and whether disposal or transportation of these hazardous materials would result in effects on the public. When compared with the No Build Alternative, Build Alternative Option 1 could have a moderate effect on hazardous waste and materials sites within the Eastern Section of the Program Corridor. When compared with Build Alternative Option 1, Build Alternative Option 2 would have slightly reduced effects due to a shorter route alignment and reduced station options. However, the magnitude of effects would be similar and would be considered moderate when compared with the No Build Alternative. When compared with Build Alternative Options 1 or 2, Build Alternative Option 3 may have slightly reduced effects due to a smaller footprint associated with a shorter route alignment, reduced station options, and reduced third track rail infrastructure. However, the magnitude of effects would be similar for Build Alternative Option 3 and would be considered moderate when compared with the No Build Alternative.

OPERATION

Western Section. Under Build Alternative Options 1, 2, and 3, passenger train frequencies proposed as part of the Program would consist of the addition of two daily round-trip intercity diesel-powered passenger trains operating the entire length of the corridor between Los Angeles and Coachella. Any hazardous wastes produced by operation of the Build Alternative Options in the Western Section of the Program Corridor would be handled at existing maintenance facilities as a part of routine operation and maintenance of passenger trains. Minor spills and releases of non-acutely hazardous

waste (i.e., petroleum, oil, and lubricants) may also occur due to normal operation along the tracks and at existing stations or maintenance facilities. While petroleum, oils, and lubricants may be used in rail operations or maintenance, proper use, storage, and disposal practices would minimize the potential for accidental releases.

Hazardous material sites would have minimal effect on the operations of a passenger rail system. Work within contaminated areas seldom goes beyond maintenance activities, which would be unlikely to increase workers' exposure to contaminants. Effects associated with the Western Section of the Program Corridor under Build Alternative Options 1, 2, and 3 would be negligible when compared with the No Build Alternative.

Eastern Section. Operational effects associated with hazardous waste and materials sites for the Build Alternative Options within the Eastern Section would be the same as those identified for the Western Section of the Program Corridor. Effects associated with the Eastern Section of the Program Corridor under Build Alternative Options 1, 2, and 3 would be negligible when compared with the No Build Alternative.

Fire Hazard Area Effects

CONSTRUCTION

Western Section. No construction activities would be required to implement any of the Build Alternative Options within the Western Section of the Program Corridor because the existing railroad ROW and stations from LAUS to Colton would be used. The Build Alternative Options would not require construction of new stations, new track or extensions to existing track, or the addition of sidings, wayside signals, drainage, or at-grade separations within the Western Section of the Program Corridor. When compared with the No Build Alternative, fire hazard area effects would be negligible within the Western Section under Build Alternative Option 1, 2, and 3.

Eastern Section. Construction of Build Alternative Option 1, 2, or 3 in the Eastern Section of the Program Corridor would require the construction of rail stations, reconfiguration of existing or creation of new rail facilities, and potential ROW acquisition. Construction activities located within a SRA or LRA Fire Hazard Severity Zones under any of the Build Alternative Options have an increased risk of causing a wildfire due to increased human activity and ignition sources, including construction equipment that could create spark, be a source of heat, or leak flammable materials within an area.

If a passenger rail system is constructed and operated within the existing rail ROW, no ROW acquisitions would be required. However, the Tier 1/Program EIS/EIR Study Area allows for infrastructure and station facilities to be located beyond the limits of the existing rail ROW, which would require acquisition of land that is identified in a SRA or LRA Fire Hazard Severity Zone. While

applicable fire codes and design features for fire suppression would be developed, potential effects depend on where the infrastructure improvements, including new stations, would be located, which have not yet been selected. Which properties would be affected by the future construction and operation of a passenger rail system, and to what extent, cannot be determined at this time. The Tier 2/Project-level analysis would evaluate the exacerbation of fire risk and whether people or structures are exposed to increased fire hazard risk.

When compared with the No Build Alternative, Build Alternative Option 1 could have a moderate effect associated with fire severity zones within the Eastern Section of the Program Corridor. When compared with Build Alternative Option 1, Build Alternative Options 2 and 3 would have the same magnitude of effects and would be considered moderate when compared with the No Build Alternative.

OPERATION

Western Section. Operation of Build Alternative Option 1, 2, or 3 within the Western Section would not result in new effects associated with fire hazard zones as the additional train trips would travel within an existing railroad ROW. When compared with the No Build Alternative, effects associated with fire hazard zones would be negligible because no additional infrastructure improvements are planned within the Western Section under Build Alternative Options 1, 2, and 3.

Eastern Section. Once construction ceases, operation of the new railroad infrastructure and stations under the Build Alternative Options would not be anticipated to result in changes associated with fire severity hazard zones. Operational effects associated with the Eastern Section of Build Alternative Option 1 would be negligible when compared with the No Build Alternative. When compared with Build Alternative Option 1, Build Alternative Options 2 and 3 would have the same magnitude of effect and would be considered negligible when compared with the No Build Alternative.

Airport and Airport Influence Area Effects

CONSTRUCTION

Western Section. No construction activities would be required to implement any of the Build Alternative Options within the Western Section of the Program Corridor because the existing railroad ROW and stations from LAUS to Colton would be used. The Build Alternative Options would not require construction of new stations, new track or extensions to existing track, or the addition of sidings, wayside signals, drainage, or at-grade separations within the Western Section of the Program Corridor. When compared with the No Build Alternative, effects on airport facilities or airport influence areas would be negligible within the Western Section under Build Alternatives Option 1, 2, and 3.

Eastern Section. Within the Eastern Section of the Program Corridor, Build Alternative Option 1 would include the construction of infrastructure improvements, such as sidings, additional main line track, wayside signals, drainage, grade-separation structures, and stations, to accommodate the proposed service. The majority of construction activities would occur within or directly adjacent to the existing railroad ROW. However, the construction of up to five new potential stations would require acquisition of parcels within local communities adjacent to the railroad ROW.

For Build Alternative Option 1, portions of the Pass Area Station Area, Mid-Valley Station Area, Indio Station Area, and Coachella Station Area are located adjacent to existing airport facilities or are within an airport influence area. Depending on where infrastructure or stations are sited within these station areas, land use compatibility, infrastructure/station design, and construction activities would be defined by the applicable ALUCP standards and regulations. When compared with the No Build Alternative, Build Alternative Option 1 effects associated with airport facilities and airport influence would be moderate. When compared with Build Alternative Option 1, Build Alternative Option 2 would have slightly reduced construction effects due to a shorter route alignment and reduced station options (i.e., one less station area [Coachella Station Area]) within an airport influence area). However, the magnitude of effects would be similar and would be considered moderate when compared with the No Build Alternative. When compared with Build Alternative Options 1 or 2, Build Alternative Option 3 may have slightly reduced effects due to a smaller footprint associated with a shorter route alignment, reduced station options, and reduced third track rail infrastructure. However, the magnitude of effects would be similar for Build Alternative Option 3 and would be considered moderate when compared with the No Build Alternative. Site-specific land use compatibility effects, along with measures to minimize potential disruption to, and land use compatibility effects on adjacent airport facilities and airport influence areas would be considered during the Tier 2/Project-level analysis.

OPERATION

Western Section. Operation of Build Alternative Option 1, 2, or 3 within the Western Section would not result in effects on airport facilities or airport influence areas as the additional train trips would travel within an existing railroad ROW. When compared with the No Build Alternative, effects on airport facilities or airport influence areas would be negligible because no additional infrastructure improvements are planned within the Western Section under Build Alternative Options 1, 2, and 3.

Eastern Section. Once construction ceases, operation of the new railroad infrastructure and stations under the Build Alternative Options would not be anticipated to result in changes associated with airport facilities or airport influence areas. Operational effects associated with the Eastern Section of Build Alternative Option 1 would be negligible when compared with the No Build Alternative. When compared with Build Alternative Option 1, Build Alternative Options 2 and 3 would have the same

magnitude of effect and would be considered negligible when compared with the No Build Alternative.

3.11.6 NEPA Summary of Potential Effects

Table 3.11-6 through Table 3.11-7 summarize the qualitative assessment of potential effects (negligible, moderate, or substantial) under NEPA for each of the Build Alternative Options. This service-level evaluation uses the Tier 1/Program EIS/EIR Study Area to determine the types of resources that may be affected and, more importantly, the relative magnitude of the effect.

For hazards and hazardous materials, the level of intensity for effects is based on the types and number of sites potentially affected and that most effects related to hazards and hazardous materials can be mitigated through preparation of a phase I environmental site assessment, phase II site investigation, a hazardous materials management program, soil management plan, a health and safety plan, and a fire control and emergency response plan. Specific mitigation measures to reduce effects would be analyzed during the Tier 2/Project-level environmental process.

Table 3.11-6. NEPA Summary of Effects on Hazardous Wastes and Material Sites

Alternative Options	Total Number of NPL Sites	Total Number of State Response Sites	Total Number of Landfill Sites	Total Number of UST and LUST Sites	Potential Intensity of Effect: Western Section	Potential Intensity of Effect: Eastern Section
No Build Alternative[a]	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Construction: None Operation: None	Construction: None Operation: None
Build Alternative Option 1 (Coachella Terminus)	0	16	8	110	Construction: Negligible Operation: Negligible	Construction: Moderate Operation: Negligible
Build Alternative Option 2 (Indio Terminus)	0	15	8	105	Construction: Negligible Operation: Negligible	Construction: Moderate Operation: Negligible
Build Alternative Option 3 (Indio Terminus with limited third track)	0	15	8	105	Construction: Negligible Operation: Negligible	Construction: Moderate Operation: Negligible

Notes:

[a] The No Build Alternative, as identified, includes existing and potential expansion of roadway, passenger rail, and air travel facilities within the Tier 1/Program EIS/EIR Study Area; however, for the service-level evaluation, identifying levels of effect from potential expansion of those facilities is speculative and would be dependent on Tier 2/Project-level analysis.

LUST=leaking underground storage tank; NPL=National Priorities List; UST=underground storage tank

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Table 3.11-7. NEPA Summary of Effects on Fire Hazard Zones

Alternative Options	Potential Intensity of Effect: Western Section	Potential Intensity of Effect: Eastern Section
No Build Alternative[a]	Construction: None Operation: None	Construction: None Operation: None
Build Alternative Option 1 (Coachella Terminus)	Construction: Negligible Operation: Negligible	Construction: Moderate Operation: Negligible
Build Alternative Option 2 (Indio Terminus)	Construction: Negligible Operation: Negligible	Construction: Moderate Operation: Negligible
Build Alternative Option 3 (Indio Terminus with limited third track)	Construction: Negligible Operation: Negligible	Construction: Moderate Operation: Negligible

Notes:

[a] The No Build Alternative, as identified, includes existing and potential expansion of roadway, passenger rail, and air travel facilities within the Tier 1/Program EIS/EIR Study Area; however, for the service-level evaluation, identifying levels of effect from potential expansion of those facilities is speculative and would be dependent on Tier 2/Project-level analysis.

Table 3.11-8. NEPA Summary of Effects on Airport Areas

Alternative Options	Potential Intensity of Effect: Western Section	Potential Intensity of Effect: Eastern Section
No Build Alternative[a]	Construction: None Operation: None	Construction: None Operation: None
Build Alternative Option 1 (Coachella Terminus)	Construction: Negligible Operation: Negligible	Construction: Moderate Operation: Negligible
Build Alternative Option 2 (Indio Terminus)	Construction: Negligible Operation: Negligible	Construction: Moderate Operation: Negligible

Alternative Options	Potential Intensity of Effect: Western Section	Potential Intensity of Effect: Eastern Section
Build Alternative Option 3 (Indio Terminus with limited third track)	Construction: Negligible Operation: Negligible	Construction: Moderate Operation: Negligible

Notes:

[a] The No Build Alternative, as identified, includes existing and potential expansion of roadway, passenger rail, and air travel facilities within the Tier 1/Program EIS/EIR Study Area; however, for the service-level evaluation, identifying levels of effect from potential expansion of those facilities is speculative and would be dependent on Tier 2/Project-level analysis.

3.11.7 CEQA Summary of Potential Impacts

Based on the information provided in Sections 3.11.4 and 3.11.5, and considering the CEQA Guidelines Appendix G Checklist questions for hazards and hazardous materials and wildfire, the Build Alternative Options would have potentially substantial impacts on hazards and hazardous materials and wildfire when reviewed on a Program-wide basis. Placing the infrastructure improvements and new stations largely within or along the existing ROW reduces the potential for substantial impacts associated with hazard and wildfire areas of concern. However, because the sites have not been selected, some areas that may contain hazardous materials and hazards may be substantially impacted. At the Tier 1/Program analysis level, it would not be possible to precisely know the location, extent, and particular characteristics of impacts on these areas. Proposed programmatic mitigation strategies discussed in Section 3.11.8 would be applied to reduce potential impacts.

Table 3.11-9 summarizes the CEQA significance conclusions for the Build Alternative Options, the proposed programmatic mitigation strategies that could be applied to minimize, reduce, or avoid the potential impacts, and the significance determination after mitigation strategies are applied. The identification and implementation of additional site-specific mitigation measures necessary for Project implementation would occur as part of the Tier 2/Project-level analysis.

Table 3.11-9. CEQA Summary of Impacts for Hazards and Hazardous Materials and Wildfires

Impact Summary	Mitigation Strategy	Significance with Mitigation Strategy
Would the Program create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		
Construction		
Western Section – No Impact. No construction impacts are anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3 because no physical improvements or routine transport, use, or disposal of hazardous materials are proposed or required within the Western Section.	Not applicable	Not applicable
Eastern Section – Potentially Significant. Potential construction impacts related to the transport, use, or disposal of hazardous materials are dependent on the location of rail infrastructure improvements and station facilities, which are currently unknown. Construction activities could result in the temporary disturbance of hazardous materials sites, including sites with known soil or groundwater contamination, which would require cleanup and disposal of those materials. Due to the variety of potential construction techniques and numerous hazardous materials sites in the Tier 1/Program EIS/EIR Study Area, there is the potential for impacts under Build Alternative Option 1, 2, or 3. The Tier 2/Project-level analysis would identify and mitigate impacts regarding transport, use, or disposal of hazardous materials during construction activities.	HAZ-1 HAZ-2 HAZ-3	**Less than Significant.** HAZ-1 through HAZ-3 would minimize, reduce or avoid potential impacts related to the transport, use, or disposal of hazardous materials during construction by requiring further evaluation into hazardous materials in the area, preparation of a Project-specific hazardous materials management program and a health and safety plan, and by ensuring compliance with all applicable local, state, and federal regulations regarding hazardous materials during the Tier 2/Project-level analysis.

Impact Summary	Mitigation Strategy	Significance with Mitigation Strategy
Operation		
Western Section – Less Than Significant. The change in train service (two additional round-trip daily trains within the Program Corridor) would not change existing land use and would not result in new hazards to the public or the environment. A less than significant impact is anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3.	Not applicable	Not applicable
Eastern Section – Potentially Significant. Potential operational impacts related to the transport, use, or disposal of hazardous materials depend on the location of new rail infrastructure improvements and station facilities, which are currently unknown. Some operational impacts could result in the generation of additional hazardous waste, contaminated materials, and solid waste, which would be handled by new maintenance facilities within the Eastern Section of the Program Corridor. Operations could also result in minor spills and releases of non-acutely hazardous waste. There is the potential for impacts under Build Alternative Option 1, 2, or 3. The Tier 2/Project-level analysis would identify and mitigate impacts related to the transport, use, or disposal of hazardous materials during operational activities.	HAZ-2	**Less than Significant.** HAZ-2 would minimize, reduce or, avoid potential impacts related to the transport, use, or disposal of hazardous materials during operational activities by preparation of Project-specific hazardous materials management program during Tier 2/Project-level analysis.
Would the Program create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?		
Construction		
Western Section – No Impact. No construction impacts are anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3 because no physical improvements are proposed or required within the Western Section.	Not applicable	Not applicable

Impact Summary	Mitigation Strategy	Significance with Mitigation Strategy
Eastern Section – Potentially Significant. Potential construction impacts are dependent on the location of rail infrastructure improvements and station facilities, which are currently unknown. Construction activities could result in the temporary disturbance of hazardous materials sites, including sites with known soil or groundwater contamination, which could release these materials into the environment. Due to the variety of potential construction techniques and numerous hazardous materials sites in the Tier 1/Program EIS/EIR Study Area, there is the potential for impacts under Build Alternative Option 1, 2, or 3. Some cleanup of UST and LUST sites may be needed, which would require transportation or disposal of hazardous materials and potentially lead to upset and accident conditions related to accidental releases. The Tier 2/Project-level analysis would identify and mitigate impacts related to the release of hazardous materials into the environment.	HAZ-1 HAZ-2 HAZ-3	**Less than Significant.** HAZ-1 through HAZ-3 would minimize, reduce or, avoid potential impacts resulting from the accidental release of hazardous materials into the environment during construction by requiring further evaluation into hazardous materials in the area, preparation of a Project-specific hazardous materials management program and a health and safety plan, and by ensuring compliance with all applicable local, state, and federal regulations regarding hazardous materials during the Tier 2/Project-level analysis.
Operation		
Western Section – Less Than Significant. The change in train service (two additional round-trip daily trains within the Program Corridor) would not change existing land use and would not include changes that would result in new hazards to the public or the environment. A less than significant impact is anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3.	Not applicable	Not applicable

Impact Summary	Mitigation Strategy	Significance with Mitigation Strategy
Eastern Section – Potentially Significant. Any hazardous wastes produced by operation of Build Alternative Option 1, 2, or 3 in the Eastern Section of the Program Corridor would be handled at new maintenance facilities as a part of routine operation and maintenance of passenger trains. Minor spills and releases of non-acutely hazardous waste (i.e., petroleum, oil, and lubricants) may also occur due to normal operation along the tracks and at stations or maintenance facilities; therefore, there is the potential for impacts under Build Alternative Option 1, 2, or 3.	HAZ-2	**Less than Significant.** HAZ-2 would minimize, reduce or, avoid potential impacts related to hazards resulting from the release of hazardous materials into the environment during operational activities by preparation of a Project-specific hazardous materials management program and a health and safety plan during Tier 2/Project-level analysis.
Would the Program emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?		
Construction		
Western Section – No Impact. No construction impacts are anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3 because no physical improvements are proposed or required within the Western Section.	Not applicable	Not applicable
Eastern Section – Potentially Significant. Potential construction impacts related to the handling of hazardous materials or generation of hazardous emissions within 0.25 mile of an existing or proposed school are dependent on the location of rail infrastructure improvements and station facilities, which are currently unknown. Due to the variety of potential construction techniques and numerous hazardous materials sites in the Tier 1/Program EIS/EIR Study Area, site-specific impacts and associated measures to existing school facilities cannot be determined at this time. The Tier 2/Project-level analysis would identify and mitigate impacts related to hazardous emissions or the handling of hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.	HAZ-2 LU-3	**Less than Significant.** HAZ-2 and LU-3 would minimize, reduce or, avoid potential impacts from conflicts with potentially affected school facilities through design and further analysis during the Tier 2/Project-level environmental process.

Impact Summary	Mitigation Strategy	Significance with Mitigation Strategy
Operation		
Western Section – Less Than Significant. Although there are schools that are located within 0.25 mile of the Western Section of the Program Corridor, the change in train service (two additional round-trip daily trains within the Program Corridor) would not change existing land use and would not result in new hazards to the public or the environment. A less than significant impact under Build Alternative Option 1, 2, or 3 is anticipated at the Tier 1/Program EIS/EIR evaluation level.	Not applicable	Not applicable
Eastern Section – Potentially Significant. Potential operational impacts related to hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school depend on the location of infrastructure improvements and station locations, which are currently unknown. Some operational impacts could result in the generation of additional hazardous waste, contaminated materials, and solid waste, which would be handled at maintenance facilities. Operations could also result in minor spills and releases of non-acutely hazardous waste. The Tier 2/Project-level analysis would identify and mitigate impacts related to hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.	HAZ-2 LU-3	**Less than Significant.** HAZ-2 and LU-3 would minimize, reduce or, avoid potential impacts from conflicts with potentially affected school facilities through design and further analysis during the Tier 2/Project-level environmental process.
Would the Program 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 it create a significant hazard to the public or the environment?		
Construction		
Western Section – No Impact. Although the Western Section of the Program Corridor contains sites included on a list of hazardous materials sites, no construction impacts are anticipated under Build Alternative Option 1, 2, or 3 at the Tier 1/Program EIS/EIR evaluation level because no physical improvements are proposed or required within the Western Section.	Not applicable	Not applicable

Impact Summary	Mitigation Strategy	Significance with Mitigation Strategy
Eastern Section – Potentially Significant. Hazardous waste and materials sites have been identified within the Eastern Section of the Program Corridor under Build Alternative 1, 2, and 3. Hazardous waste and material sites pose a safety risk to workers who might be exposed to contaminated soil, water, and vapors. Construction activities involving excavation increase the likelihood for encountering existing and unknown regulated materials. In addition, vehicles and equipment used during construction activities, such as fuel storage tanks, have the potential to release hazardous materials (mainly petroleum products) and have the potential to increase of material spills. Potential impacts associated with hazardous waste and material sites are dependent on the location of rail infrastructure improvements and station facilities, which are currently unknown. The Tier 2/Project-level analysis would identify and analyze site-specific impacts associated with hazardous waste and material sites.	HAZ-1 HAZ-2 HAZ-3	**Less than Significant.** HAZ-1 through HAZ-3 would minimize, reduce or, avoid potential impacts related to construction on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 by requiring further evaluation (e.g., Phase I environmental assessment, Phase II site assessment) into hazardous materials on the site, preparation of a Project-specific hazardous materials management program and a health and safety plan, and by ensuring compliance with all applicable local, state, and federal regulations regarding hazardous materials during the Tier 2/Project-level analysis.
Operation		
Western Section – Less Than Significant. The Western Section of the Program Corridor contains sites included on a list of hazardous materials sites. However, the change in train service (two additional round-trip daily trains within the Program Corridor) would not change existing land use and would not result in new hazards to the public or the environment. A less than significant impact is anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3.	Not applicable	Not applicable

Impact Summary	Mitigation Strategy	Significance with Mitigation Strategy
Eastern Section – Less Than Significant. Hazardous material sites would have minimal impact on the operations of a passenger rail system. Work within contaminated areas seldom goes beyond maintenance activities, which would be unlikely to increase workers' exposure to contaminants. Once the Program is operational, the sites included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 would not be anticipated to be significantly disturbed and, therefore, would not require additional remediation or coordination with governing agencies. A less than significant impact is anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3.	Not applicable	Not applicable
Would the Program be 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 Program result in a safety hazard or excessive noise for people residing or working in the project area?		
Construction		
Western Section – No Impact. Although the Western Section of the Program Corridor contains areas that are located within an airport land use plan, no construction impacts are anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3 because no physical improvements are proposed or required within the Western Section.	Not applicable	Not applicable
Eastern Section – Potentially Significant. Potential impacts associated with consistency with airport land use compatibility plans depend on the location of rail infrastructure improvements, station facilities, and type of construction activities, which are currently unknown. Portions the Eastern Section of the Program Corridor are located within the Banning Municipal Airport, Bermuda Dunes Executive Airport, Palm Springs International Airport, and Jacqueline Cochran Regional Airport Influence Areas. A detailed analysis of the airport land use compatibility plans for these airports cannot be considered at the Tier 1/Program EIS/EIR level as the locations of infrastructure and station facilities is unknown. The Tier 2/Project-level analysis would identify conflicts with these airport land use compatibility plans.	LU-3	**Less than Significant.** LU-3 would minimize, reduce or, avoid potential impacts from conflicts with applicable airport land use consistency plans and policies through design and further analysis.

Impact Summary	Mitigation Strategy	Significance with Mitigation Strategy
Operation		
Western Section – Less Than Significant. The Western Section of the Program Corridor contains areas that are located within an airport land use plan. However, the change in train service (two additional round-trip daily trains within the Program Corridor) would not change existing land use and would not result in new safety hazards or excessive noise for people residing or working in the area. A less than significant impact is anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3.	Not applicable	Not applicable
Eastern Section – Potentially Significant. Potential operational impacts associated with consistency with airport land use compatibility plans depend on the location of rail infrastructure improvements and station facilities, which are currently unknown. Portions the Eastern Section of the Program Corridor are located within the Banning Municipal Airport, Bermuda Dunes Executive Airport, Palm Springs International Airport, and Jacqueline Cochran Regional Airport Influence Areas. A detailed analysis of the airport land use compatibility plans for these airports cannot be considered at the Tier 1/Program EIS/EIR level as the locations of infrastructure and station facilities is unknown. The Tier 2/Project-level analysis would identify conflicts with these airport land use compatibility plans.	LU-3	**Less than Significant.** LU-3 would minimize, reduce or, avoid potential impacts from conflicts with applicable airport land use consistency plans and policies through design and further analysis.
Would the Program impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?		
Construction		
Western Section – No Impact. No construction impacts are anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3 because no physical improvements are proposed or required within the Western Section.	Not applicable	Not applicable

Impact Summary	Mitigation Strategy	Significance with Mitigation Strategy
Eastern Section – Potentially Significant. Potential construction impacts that could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan are dependent on the location of rail infrastructure improvements and station facilities, which are currently unknown. The Tier 2/Project-level analysis would identify and mitigate impacts on implementation of applicable emergency response and evacuation plans.	HAZ-4 LU-2 LU-3	**Less than Significant.** HAZ-4, LU-2, and LU-3 would minimize, reduce, or avoid potential impacts from interfering with an adopted emergency response plan by requiring coordination with emergency providers through design and analysis.
Operation		
Western Section – Less Than Significant. The change in train service (two additional round-trip daily trains within the Program Corridor) would not change existing land use and would not substantially impair an adopted emergency response plan or emergency evacuation plan. A less than significant impact is anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3.	Not applicable	Not applicable
Eastern Section – Less than Significant. Once construction ceases, operation of the new railroad infrastructure and stations under Build Alternative Option 1, 2, or 3 would not be anticipated to result in changes that would conflict or interfere with applicable emergency response plans or emergency evacuation plans. A less than significant impact is anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3.	Not applicable	Not applicable
Would the Program expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?		
Construction		
Western Section – No Impact. No construction impacts under are anticipated at the Tier 1/Program EIS/EIR evaluation level Build Alternative Option 1, 2, or 3 because no physical improvements are proposed or required within the Western Section.	Not applicable	Not applicable

Impact Summary	Mitigation Strategy	Significance with Mitigation Strategy
Eastern Section – Potentially Significant. Potential construction impacts resulting from wildland fires are dependent on the location of rail infrastructure improvements and station facilities, which are currently unknown. For construction activities that would occur in high or very high fire hazard severity zones, there is an increased risk of wildfire impacts due to increased human activity and ignition sources, including construction equipment that could create spark, be a source of heat, or leak flammable materials within an area. The Tier 2/Project-level analysis would evaluate the potential of fire risk and whether people or structures would be exposed to significant fire risk during construction activities.	HAZ-4	**Less than Significant.** HAZ-4 would minimize, reduce, or avoid potential impacts on people and structures resulting from wildland fires by preparation of a Project-specific fire control and emergency response plan during the Tier 2/Project-level analysis.
Operation		
Western Section – No Impact. The change in train service (two additional round-trip daily trains within the Program Corridor) would not change existing land use that would result in an exacerbation of wildfire risks or hazards. Therefore, no operational impacts are anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3.	Not applicable	Not applicable
Eastern Section – Potentially Significant. Once construction ceases, operation of the new railroad infrastructure and stations under the Build Alternative Options would not be anticipated to result in changes associated with fire severity hazard zones. However, the operation of new station facilities within fire severity zones could result in an increased wildfire risk to people or structures in the area; therefore there is potential for significant impacts under Build Alternative Option 1, 2, or 3. The Tier 2/Project-level analysis would evaluate the potential for people or structures to be exposed to wildfire risk during operations.	HAZ-4	**Less than Significant.** HAZ-4 would minimize, reduce, or avoid potential impacts on people and structures resulting from wildland fires by preparation of a Project-specific fire control and emergency response plan and traffic management plan during the Tier 2/Project-level analysis.

Impact Summary	Mitigation Strategy	Significance with Mitigation Strategy
If located in or near state responsibility areas or lands classified as very high fire severity zones, would the Program substantially impair an adopted emergency response plan or emergency evacuation plan?		
Construction		
Western Section – No Impact. No construction impacts are anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3 because no physical improvements are proposed or required within the Western Section.	Not applicable	Not applicable
Eastern Section – Potentially Significant. Potential construction impacts that could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan are dependent on the location of rail infrastructure improvements and station facilities, which are currently unknown. The Tier 2/Project-level analysis would identify and mitigate impacts on implementation of applicable emergency response and evacuation plans.	HAZ-4 LU-2 LU-3	**Less than Significant.** HAZ-4, LU-2, and LU-3 would minimize, reduce, or avoid potential impacts from interfering with an adopted emergency response plan by requiring coordination with emergency providers through Tier 2/Project-level design and analysis.
Operation		
Western Section – Less Than Significant. The change in train service (two additional round-trip daily trains within the Program Corridor) would not change existing land use and would not substantially impair an adopted emergency response plan or emergency evacuation plan. A less than significant impact is anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3.	Not applicable	Not applicable
Eastern Section – Less than Significant. Once construction ceases, operation of the new railroad infrastructure and stations under Build Alternative Option 1, 2, or 3 would not be anticipated to result in changes that would conflict or interfere with applicable emergency response plans or emergency evacuation plans. A less than significant impact is anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3.	Not applicable	Not applicable

Impact Summary	Mitigation Strategy	Significance with Mitigation Strategy
If located in or near state responsibility areas or lands classified as very high fire severity zones, would the Program, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?		
Construction		
Western Section – No Impact. No construction impacts are anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3 because no physical improvements are proposed or required within the Western Section.	Not applicable	Not applicable
Eastern Section – Potentially Significant. Potential construction impacts resulting from wildland fires are dependent on the location of rail infrastructure improvements and station facilities, which are currently unknown. For construction activities that would occur in high or very high fire hazard severity zones, there is an increased risk of wildfire impacts due to increased human activity and ignition sources, including construction equipment that could create spark, be a source of heat, or leak flammable materials within an area. The Tier 2/Project-level analysis would evaluate the potential of fire risk and whether people or structures would be exposed to significant fire risk during construction activities.	HAZ-4	**Less than Significant.** HAZ-4 would minimize, reduce, or avoid potential impacts on people and structures resulting from wildland fires by preparation of a Project-specific fire control and emergency response plan during the Tier 2/Project-level analysis.
Operation		
Western Section – No Impact. The change in train service (two additional round-trip daily trains within the Program Corridor) would not change existing land use and would not result in an exacerbation of wildfire risks or hazards. Therefore, no operational impacts under Build Alternative Option 1, 2, or 3 are anticipated at the Tier 1/Program EIS/EIR evaluation level.	Not applicable	Not applicable

Impact Summary	Mitigation Strategy	Significance with Mitigation Strategy
Eastern Section – Potentially Significant. Once construction ceases, operation of the new railroad infrastructure and stations under the Build Alternative Options would not be anticipated to result in changes associated with fire severity hazard zones. However, the operation of new station facilities within fire severity zones could result in an increased wildfire risk to people or structures in the area; therefore there is potential for significant impacts under Build Alternative Option 1, 2, or 3. The Tier 2/Project-level analysis would evaluate the potential for people or structures to be exposed to wildfire risk during operations.	HAZ-4	**Less than Significant.** HAZ-4 would minimize, reduce, or avoid potential impacts on people and structures resulting from wildland fires by preparation of a Project-specific fire control and emergency response plan and traffic management plan during the Tier 2/Project-level analysis.
If located in or near state responsibility areas or lands classified as very high fire severity zones, would the Program require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?:		
Construction		
Western Section – No Impact. No construction impacts are anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3 because no physical improvements are proposed or required within the Western Section.	Not applicable	Not applicable
Eastern Section – Potentially Significant. Potential construction impacts resulting from wildland fires are dependent on the location of rail infrastructure improvements and station facilities, which are currently unknown. For construction activities that would occur in high or very high fire hazard severity zones, there is an increased risk of wildfire impacts due to increased human activity and ignition sources, including construction equipment that could create spark, be a source of heat, or leak flammable materials within an area; therefore there is potential for significant impacts under Build Alternative Option 1, 2, or 3. The Tier 2/Project-level analysis would evaluate the potential of fire risk and whether construction activities would have fire risks to the environment.	HAZ-4	**Less than Significant.** HAZ-4 would minimize, reduce, or avoid potential impacts on people and structures resulting from wildland fires by preparation of a Project-specific fire control and emergency response plan during the Tier 2/Project-level analysis.

Impact Summary	Mitigation Strategy	Significance with Mitigation Strategy
Operation		
Western Section – Less Than Significant. The change in train service (two additional round-trip daily trains within the Program Corridor) on an existing rail corridor would require maintenance of existing infrastructure. However, with adherence to existing developed maintenance plans and procedures, maintenance activities on the existing rail corridor would not exacerbate fire risk within the area. Therefore, a less than significant impact is anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3.	Not applicable	Not applicable
Eastern Section – Potentially Significant. Operation of the Program under Build Alternative Option 1, 2, or 3 would require continual maintenance of rail infrastructure and station facilities that could be located in fire hazard severity zones. Potential operational impacts resulting from wildland fires are dependent on the location of rail infrastructure improvements and station facilities, which are currently unknown. The Tier 2/Project-level analysis would identify and mitigate impacts related to the maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment during construction.	HAZ-4	**Less than Significant.** HAZ-4 would minimize, reduce, or avoid potential impacts on people and structures resulting from wildland fires by preparation of a Project-specific fire control and emergency response plan during the Tier 2/Project-level analysis.
If located in or near state responsibility areas or lands classified as very high fire severity zones, would the Program expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?		
Construction		
Western Section – No Impact. No construction impacts are anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3 because no physical improvements are proposed or required within the Western Section.	Not applicable	Not applicable

Impact Summary	Mitigation Strategy	Significance with Mitigation Strategy
Eastern Section – Potentially Significant. For construction activities that would occur in high or very high fire hazard severity zones, there is an increased risk of wildfire impacts due to increased human activity and ignition sources, including construction equipment that could create spark, be a source of heat, or leak flammable materials within an area. The Tier 2/Project-level analysis would evaluate the potential of fire risk and whether construction activities could result in downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	HAZ-4	**Less than Significant.** HAZ-4 would minimize, reduce, or avoid potential impacts on people and structures resulting from wildland fires by preparation of a Project-specific fire control and emergency response plan during the Tier 2/Project-level analysis.
Operation		
Western Section – No Impact. The change in train service (two additional round-trip daily trains within the Program Corridor) would not change existing land use that would result in exposure of people or structures to new flooding, landslide, or fire hazards as a result of runoff, post-fire slope instability, or drainage changes. Therefore, no operational impacts are anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3.	Not applicable	Not applicable
Eastern Section – Less than Significant. Ongoing operations are not expected to expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, a less than significant operational impact is anticipated at the Tier 1/Program EIS/EIR evaluation level under Build Alternative Option 1, 2, or 3.	Not applicable	Not applicable

Notes:

EIS/EIR=environmental impact statement/environmental impact report; LUST=leaking underground storage tank; ROW=right-of-way; UST=underground storage tank

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3.11.8 Avoidance, Minimization, and Mitigation Strategies

Identified below are proposed programmatic mitigation strategies for further consideration in the Tier 2/Project-level analysis. Specific mitigation measures, to the extent required, would be identified and discussed during Tier 2/Project-level analysis after design details are known and specific impacts are identified. Potential site-specific mitigation measures associated with areas found to be contaminated would be developed in consultation with the appropriate agencies with jurisdiction over the property or cleanup efforts.

Programmatic mitigation strategies include design considerations for either avoidance of contaminated properties or minimization of soil disturbance in contaminated areas. Where contaminated materials cannot be avoided, proper characterization and disposal of contaminated materials under applicable rules and regulations would occur. Proposed programmatic mitigation strategies include, but are not limited to, the following:

Mitigation Strategy HAZ-1: During Tier 2/Project-level analysis, a Phase I Environmental Site Assessment shall be conducted to determine the significance of impacts on hazardous waste or materials sites due to the siting of specific rail infrastructure or station facility proposed. The site-specific Phase I Environmental Site Assessment shall adhere to ASTM-conforming requirements and include recommendations on if a subsequent Phase II Site Investigation is required for the selected site. The Phase I Environmental Site Assessment shall also include a discussion of observed and/or suspected asbestos-containing materials, potential lead-based paint, and other materials falling under the Universal Waste requirements within the selected site.

Mitigation Strategy HAZ-2: During Tier 2/Project-level analysis, a site-specific hazardous materials management program shall be prepared for the specific rail infrastructure or station facilities proposed. The hazardous materials management program shall provide for safe storage, containment, and disposal of chemicals and hazardous materials related to Project construction and operation, including the proper disposal of waste materials. The hazardous materials management program shall include, but should not be limited to, the following:

- A description of hazardous materials and hazardous wastes used (29 Code of Federal Regulations 1910.1200)
- A description of handling, transport, treatment, and disposal procedures, as relevant for each hazardous material or hazardous waste (29 Code of Federal Regulations 1910.120)
- Preparedness, prevention, contingency, and emergency procedures, including emergency contact information (29 Code of Federal Regulations 1910.38)

- A description of personnel training including, but not limited to: (1) recognition of existing or potential hazards resulting from accidental spills or other releases; (2) implementation of evacuation, notification, and other emergency response procedures; (3) management, awareness, and handling of hazardous materials and hazardous wastes, as required by their level of responsibility (29 Code of Federal Regulations 1910)
- Instructions on keeping Safety Data Sheets for each on-site hazardous chemical (29 Code of Federal Regulations 1910.1200)
- Identification of the locations of hazardous material storage areas, including temporary storage areas, which shall be equipped with secondary containment sufficient in size to contain the volume of the largest container or tank (29 Code of Federal Regulations 1910.120)

Mitigation Strategy HAZ-3: During Tier 2/Project-level analysis, sites identified for the specific rail infrastructure or station facility proposed shall be screened by the identified lead agency or agencies to determine if land use restrictions or activity use limitations are present. If the site contains land use restrictions or activity use limitations that would be affected by the Project, coordination with the governing agency (Department of Toxic Substance Control or Regional Water Quality Control Board) shall be required. Such coordination shall consist of notifying the local enforcement branch of the agencies that work is planned for a restricted property. Notification typically results in a meeting with regulators that would determine the requirements for the property during the Project. A soil management plan and a health and safety plan are typically required to be completed, reviewed, and approved in writing by the governing agency (Department of Toxic Substance Control or Regional Water Quality Control Board). These requirements, and any additional requirements, shall be determined in coordination with the applicable regulatory agencies.

Mitigation Strategy HAZ-4: During Tier 2/Project-level analysis, a Project-specific Fire Control and Emergency Response Plan shall be prepared in coordination with local fire departments for the sites identified for the specific rail infrastructure or station facility proposed. The plan shall describe fire prevention and response practices that shall be implemented during construction and operation to minimize the risk of fire and, in the case of fire, provide for immediate fire suppression and notification.

Mitigation Strategy LU-2: Based on the results of a subsequent Tier 2/Project-level analysis and recommendations, the identified lead agency or agencies shall determine if a construction management plan is required for construction activities of the Tier 2/Project-level improvement being proposed. If required, a construction management plan shall be developed by the contractor and reviewed by the lead agency or agencies prior to construction and implemented during construction activities. The construction management plan shall include, but not be limited to, the following:

- Measures that minimize effects on populations and communities within the Tier 2/Project Study Area
- Measures pertaining to visual protection, air quality, safety controls, noise controls, and traffic controls to minimize effects on populations and communities within the identified Tier 2/Project Study Area
- Measures to ensure property access is maintained for local businesses, residences, and community and emergency services
- Measures to consult with local transit providers to minimize effects on local and regional bus routes in affected communities

Mitigation Strategy LU-3: During a subsequent Tier 2/Project-level analysis, a land use consistency analysis shall be conducted by the identified lead agency or agencies to determine consistency of the Tier 2/Project-level improvement being proposed with the applicable local jurisdictional general plans or programs. If the land use consistency analysis identifies sensitive land uses or environmental resources within the Tier 2/Project-level Study Area, design or siting strategies shall be identified by the lead agency or agencies to avoid or minimize conflicts with sensitive land uses or environmental resources.

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