

4.9 Hazards and Hazardous Materials

This section describes the hazards and hazardous materials along the IC Project Alignment and associated with construction and operation of the IC Project, as well as the potential impacts and alternatives.

4.9.1 Environmental Setting

4.9.1.1 Physical Environment

The physical environment along the IC Project Alignment varies across the Segments. The geography and topography of the IC Project Alignment is described in Sections 4.4.2.1.1, 4.4.2.2.2, and 4.7.1.2. The land use patterns along the IC Project Alignment are described in Sections 4.2.1, 4.11.1, 4.12.1, 4.13.1, and 4.16.1, among others. The biological environment along the IC Project Alignment is presented in detail in Section 4.4.

4.9.1.2 Hazardous Materials and Waste

As described in Section 3.1.2 and Section 4.11.1, the existing land use along the IC Project Alignment is primarily open space, with scattered residential uses. Widely-dispersed industrial uses are found in the eastern portions of Segment 4 (mining and solar electric generating facilities). Institutional uses, primarily military facilities, are located adjacent to Segments 1, 2, 3S and 4 and adjacent to Inyokern Substation and Coolwater Substation. Portions of the IC Project Alignment are located on lands managed by the Bureau of Land Management, Bureau of Indian Affairs, China Lake Naval Air Weapons Station, Edwards Air Force Base, and Marine Corps Logistics Base-Barstow, and California State Lands Commission. Past land uses along the IC Project Alignment included primarily open space, with military uses, hardrock mining, mineral prospecting and processing, and agriculture found along the alignment.

State and federal databases were reviewed to identify hazardous materials and hazardous waste facilities including federal Superfund sites, State Response sites, Voluntary Cleanup sites, School Cleanup sites, Permitted Operating sites, Corrective Action sites, and Tiered Permit sites within or adjacent to the IC Project Alignment.

No records were found that indicate Superfund sites are present within or immediately adjacent to the IC Project Alignment. Records pertaining to facilities reporting to the USEPA's Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) database were not found within 0.5 mile of the IC Project Alignment. The results of these database reviews are presented in Table 4.9-1 below and shown on Figure 4.9-1.

Table 4.9-1: Hazardous Material and Waste Sites within 0.5 Miles of the IC Project Alignment

Project Segment	Source Database	Facility Name	Location	Type	Distance (miles/direction)
1	Geotracker	China Lake Naval Air Weapons Station - Site 60 - B2 Spotting Tower 3 Quonset Hut	35.796, -117.848	Military Cleanup Site	0.1 / E
1	Geotracker	Lone Pine Class III Landfill	36.594, -118.035	Land Disposal Site	0.2 / W
1	Geotracker	Big Pine County Yard	37.148, -118.289	Leaking UST (Closed)	0.4 / NE
1	Geotracker	PPG Industries	36,476, -118.033	Leaking UST (Cleanup)	0.2 / E
1	Geotracker	Sawmill Class III Landfill	35.846, -117.873	Land Disposal Site	0.2 / W
1	Envirostor	Jorgensen Reduction Plant	37.283, -118.382	Formerly Used Defense Site	0
1	Envirostor	Olancha Airfield	36.284, -118.000	Formerly Used Defense Site	0.4 / W
1	RCRAInfo	A and R Anchor Big Pine Reservation	37.152, -118.283	Small Quantity Generator	0.5 / NE
2	Enviromapper	Luz Solar Partners VI through VII	35.024, -117.552,	Hazardous Waste Generating Facility	> 0.1 / W
3N	Envirostor	Oriental Mill Site	34.874, -116.891	Suspected Contaminant Site (heavy metals)	> 0.1 / SW
3N	Envirostor	Waterloo Mill Site	34.876, -116.891	Suspected Contaminant Site (heavy metals)	> 0.1 / W
3N	Geotracker	Fort Irwin Road Land Treatment Facility	34.975, -117.002	Contaminated Soil Disposal Site (Capped)	0
3N, 3S, 4	USEPA TRI	Reliant Energy Coolwater Electric Generating Station	34.863, -116.853	Handling of dioxin/ dioxin-like compounds	0
3S	USEPA TRI	Airco Industrial Gases	34.858, -116.855	Industrial Gas Manufacturing	> 0.1 / E
4	Envirostor	Reliant Energy Coolwater LLC	34.863, -116.853	Hazardous Waste Management Unit (Clean closed)	> 0.5 / E

4.9.1.3 Airports, Airstrips, and Heliports

Public airports, public use airports, private airstrips within two miles of the IC Project Alignment, and airports with land use plans in which the IC Project Alignment is located, are presented in Table 4.9-2 below and shown in Figureset 4.9-2.

Table 4.9-2: Airports and Airstrips

Project Segment	Facility	Location	Type	Distance from Project Alignment (miles/direction)
1	Lone Pine/Death Valley Airport*	36.590, -118.047, Lone Pine	Public Airport	0.4 / W
1	Independence Airport	36.810, -118.203, Independence	Public Airport	1.0 / NW
1	Inyokern Airport*	35.662, -117.825, Inyokern	Public Airport	1.1 / W
2	Inyokern Airport*	35.662, -117.825, Inyokern	Public Airport	1.6 / NW
4	Harvard Airstrip	34.962, -116.675	Private Airstrip	1.8 / NW
4	Baker Airport*	35.286, -116.081, Baker	Public Airport	0.3 / N

* Airport with land use plan in which the IC Project Alignment is located.

4.9.1.3.1 Military Installations

Two military aviation installations—the China Lake Naval Air Weapons Station (CLNAWS) and Edwards Air Force Base—are located adjacent to Segments 1 and 2, respectively. Each installation has unique flying operations, and their primary missions are to test military aircraft and weapon system (Kern County 2012). The IC Project Alignment is approximately 5 miles from the nearest runway at the China Lake Naval Air Weapons Station.

A portion of Segment 3N is routed through the Victorville Precision Bombing Range N-1 Formerly Used Defense Site (“FUD”; FUDS Number J09CA0672, Installation Identification CA99799F565700), and a portion of Segment 3S is routed through lands identified as the Formerly Used Defense Sites—Marine Corps Logistics Base Barstow (FUDS Number J09CA7045, Installation Identification CA99799F695100).

4.9.1.3.1.1 Victorville Precision Bombing Range N-1 Formerly Used Defense Site

This FUD is categorized by the Formerly Used Defense Sites Program as a Military Munitions Response Program (MMRP) site. The DoD Environment, Safety and Occupational Health Network and Information Exchange’s (DENIX) Munitions Response Site (MRS) Inventory indicates that there is “unlimited public access” to the N-1 range and that there are no land use controls (DENIX 2019).

Further, the Defense Environmental Restoration Program for Formerly Used Defense Sites’ Archives Search Report Findings document that addresses Victorville PBR N-1 states: “We found only evidence of sand-filled practice bombs. ... We found no evidence of HE bombs (i.e. fragments) or of unexploded spotting charges.” (USACE 1995)

4.9.1.3.1.2 Marine Corps Logistics Base Barstow Formerly Used Defense Site

This FUD is categorized by the Formerly Used Defense Sites Program as a Military Munitions Response Program (MMRP). The DoD Environment, Safety and Occupational Health Network and Information Exchange’s Munitions Response Site (MRS) Inventory indicates that there is “unlimited public access” to the site and that there are no land use controls (DENIX 2019).

4.9.1.4 Emergency Response

The California Emergency Management Agency (Cal/EMA) established a Standard Emergency Management System (SEMS) to harmonize incident command, mutual aid agreements, roles, responsibilities, and training. Kern County, Inyo County, San Bernardino County, and the City of

Barstow each have developed and implemented emergency response plans. US 395 is the only designated evacuation route crossed by the IC Project Alignment or identified in the area.

4.9.1.4.1 Inyo County

Per Inyo County Code Section 2.56.080, the Inyo County Disaster Council is responsible for development of a county emergency plan. The Inyo County Director of Emergency Services is empowered to request a local emergency proclamation or proclaim a local emergency when the Board of Supervisors is not in session. All officers and employees of the county and enrolled volunteers constitute its emergency organization.

4.9.1.4.2 Kern County

Kern County Fire Department (KCFD) maintains and implements a SEMS-based Emergency Operations Plan (EOP). The EOP is administered by the KCFD Office of Emergency Services which is responsible for coordinating local incident response. The EOP contains specific guidance for hazardous materials incident response. (KCFD 2008)

4.9.1.4.3 San Bernardino County

SBCFD maintains and implements a SEMS-based EOP. The Office of Emergency Services administers the EOP and coordinates with several cities and towns, special districts, state and federal agencies, and non-governmental organizations (NGOs). (SBCFD 2013)

4.9.1.4.4 City of Barstow

The City of Barstow maintains and implements a SEMS-based EOP. The EOP contains Annexes describing plans for hazardous materials releases, airplane crashes, and wildfires. (City of Barstow 2015)

4.9.1.5 Wildland Fires

Fire departments and services located along the IC Project Alignment are presented in Section 4.15.1.1, Fire Protection.

Within California, fire hazard severity zones are designated by the California Department of Forestry and Fire Protection (CALFIRE). Fire hazard severity zone levels range from moderate to very high. Fire hazard severity zones are administered by the federal, state, or local government that is financially responsible for preventing and suppressing wildfires in a given area, and are categorized into the following three groups:

- Federal Responsibility Areas: The federal government is financially responsible for wildfire suppression
- State Responsibility Areas: The state is financially responsible for wildfire suppression
- Local Responsibility Areas: Cities or counties are financially responsible for wildfire suppression

The existing subtransmission lines and substations associated with the IC Project are located within all three responsibility areas. The majority of the IC Project Alignment is located within the CAL FIRE moderate fire hazard severity zone. The majority of the remainder of the IC Project Alignment is located within the CAL FIRE high and very high fire hazard severity zones; some portions of the IC Project Alignment are located in areas designated as non-wildland/non-urban land. Tabular information on the miles of IC Project Alignment located within these zones is presented in Table 4.9-3 below, and shown graphically on Figure 4.9-3, Fire Hazard Severity Zones. CPUC Fire-Threat Map data is also presented in

Figure 4.9-3. Figureset 4.9-4, Wildland-Urban Interface, illustrates the wildland-urban interfaces along the IC Project Alignment.

Table 4.9-3: Miles of IC Project Alignment within Designated Fire Hazard Severity Zones

Project Segment		Distance (miles)	SRA	LRA	FRA	URA
1	Very High	—	—	—	—	—
	High	81.3	61	2.6	17.2	0.5
	Moderate	42.2	0.9	18.4	22.9	—
	Unzoned	2.8	—	2.2	0.6	—
2	Very High	—	—	—	—	—
	High	—	—	—	—	—
	Moderate	46.5	—	22.3	24.2	1.9
	Unzoned	—	—	—	—	—
3N	Very High	—	—	—	—	—
	High	—	—	—	—	—
	Moderate	42.1	—	20.4	12	9.7
	Unzoned	2.2	—	2.1	—	0.1
3S	Very High	—	—	—	—	—
	High	—	—	—	—	—
	Moderate	41.50	—	20.1	7	14.4
	Unzoned	2	—	2	—	—
4	Very High	—	—	—	—	—
	High	—	—	—	—	—
	Moderate	93.4	—	29	59.7	4.7
	Unzoned	—	—	—	—	—

Abbreviations:

FRA: Federal Responsibility Area

SRA: State Responsibility Area;

LRA: Local Responsibility Area;

URA: Unspecified Responsibility Area

Source: CALFIRE 2018

CAL FIRE’s Fire and Resource Assessment Program has developed a rating of wildland fire threat based on the combination of potential fire behavior (including fuel availability) and expected fire frequency to create an index for risk assessment. Portions of Segment 1 in the vicinity of Bishop and Lone Pine are located in areas designated by CAL FIRE as having a Very High fire threat; the majority of Segment 1 is located in areas designated as having a Moderate fire threat. The very large majority of Segments 2 and 4, and the entirety of Segments 3N and 3S are located in areas designated as having a Moderate fire threat or in areas that are identified as non-fuel. This data is presented graphically in Figureset 4.9-5, Fire Threat Zones. Additional information regarding wildfires is presented in Section 4.20 below.

4.9.1.6 Schools

No school buildings are located within 0.25 miles of the IC Project Alignment in Segments 1, 2, 3N, or 3S. In Segment 4, four school buildings are located within 0.25 mile of the IC Project Alignment: Baker Elementary, Baker Junior High School, Baker High School, and Baker Valley Day School. All four are found in a single cluster in the community of Baker at 72100 School House Lane, approximately 0.25 mile south of the IC Project Alignment.

4.9.2 Regulatory Setting

Federal, state, and local regulations were reviewed for applicability to the IC Project.

4.9.2.1 Federal

4.9.2.1.1 Comprehensive Environmental Response, Compensation, and Liability Act (Superfund) of 1980 (42 U.S.C. § 9601 et seq.)

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provides a federal Superfund to clean up uncontrolled or abandoned hazardous-waste sites, as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, EPA has the power to seek out those parties responsible for any release and ensure their cooperation in the cleanup.

4.9.2.1.2 The Superfund Amendments and Reauthorization Act of 1986 Title III (40 CFR § 68.110 et seq.)

The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA and established a nationwide emergency planning and response program, and imposed reporting requirements for businesses that store, handle, or produce significant quantities of extremely hazardous materials. The act requires states to implement a comprehensive system to inform local agencies and the public when a significant quantity of such materials is stored or handled at a facility. Additionally, SARA identifies requirements for planning, reporting, and notification concerning hazardous materials.

4.9.2.1.3 Clean Water Act (33 U.S.C. Section 1251 et seq.)

Enacted in 1972, the Federal Clean Water Act (CWA; 33 U.S.C. § 1251 et seq.) and subsequent amendments outline the basic protocol for regulating discharges of pollutants to waters of the U.S. It is the primary federal law applicable to water quality of the nation’s surface waters, including lakes, rivers, and coastal wetlands. Enforced by the USEPA, it was enacted “... to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” The CWA authorizes States to adopt water quality standards and includes programs addressing both point and non-point pollution sources. The CWA also established the NPDES, and provides the USEPA the authority to implement pollution control programs, such as setting wastewater standards for industry and water quality standards for surface waters (see below for a discussion of the NPDES program).

In California, programs and regulatory authority under the CWA have been delegated by USEPA to the SWRCB and its nine RWQCBs. Under Section 402 of the CWA as delegated to the State of California, a discharge of pollutants to navigable waters is prohibited unless the discharge complies with an NPDES permit. The SWRCB and RWQCBs have developed numeric and narrative water quality criteria to protect beneficial uses of state waters and waterways. Beneficial uses along the IC Project Alignment include water supply, groundwater recharge, aquatic habitat, wildlife habitat, and recreation.

4.9.2.1.4 Clean Air Act

The Clean Air Act (CAA) provides measures aimed at preventing the accidental release of hazardous materials into the atmosphere. Regulations implementing the CAA and governing hazardous materials emissions are provided in Title 40, Part 68 of the CFR. Implementation of these regulations is intended to prevent the accidental release of hazardous materials into the environment.

4.9.2.1.5 Resource Conservation and Recovery Act (42 U.S.C. §6901 et seq.)

The Resource Conservation and Recovery Act (RCRA) regulates hazardous waste from the time that waste is generated, through to its management, storage, transport, and treatment, until its final disposal. The EPA has authorized the Department of Toxic Substances Control (DTSC) in California and the NDEP to administer their respective RCRA programs.

4.9.2.1.6 U.S. Department of Transportation

The USDOT has the regulatory responsibility for the safe transportation of hazardous materials under the Hazardous Materials Transportation Act (HMTA), as amended and codified in 49 U.S.C. 5101 et seq.

4.9.2.1.7 Code of Federal Regulations Title 14

All airports and navigable airspace not administered by the DoD are under the jurisdiction of the Federal Aviation Administration (FAA). Title 14, Part 77 of the CFR establishes the standards and required notification for objects affecting navigable airspace. In general, construction projects exceeding 200 feet in height—or those extending at a ratio greater than 100 to 1 (horizontal to vertical) from a public or military airport runway more than 3,200 feet long, out to a horizontal distance of 20,000 feet—are considered potential obstructions and require FAA notification. In addition, construction projects extending at a ratio greater than 50 to 1 (horizontal to vertical) from a public or military airport runway measuring 3,200 feet or less, out to a horizontal distance of 10,000 feet, are considered potential obstructions and require FAA notification. Title 14, Part 133 of the CFR also requires an operating plan to be developed in coordination with and approved by the local FAA Flight Standards District Office that has jurisdiction over when helicopter use would be required.

4.9.2.1.8 Occupational Safety and Health Administration (29 CFR 1900-1910)

Established under the OSHA Act of 1970, OSHA regulates workplace safety and health. The agency's mission is to prevent work-related injuries, illnesses, and deaths.

4.9.2.1.9 Hazard Management and Resource Restoration Program

The Hazard Management and Resource Restoration (HMRR) program is administered by the BLM. Its mission is to protect lives, resources, and property, and to improve the health of landscapes and watersheds by: (1) minimizing the environmental contamination on public lands, (2) reducing and eliminating risk associated with physical and environmental hazards, (3) restoring resources impacted by oil discharges and hazardous release, and (4) administering CERCLA assessments.

4.9.2.2 State

4.9.2.2.1 California Environmental Protection Agency

The California Environmental Protection Agency (Cal/EPA) is the California state agency responsible for developing, implementing, and enforcing the state's environmental protection laws that ensure clean air, clean water, clean soil, safe pesticides, and waste recycling and reduction. Cal/EPA oversees the DTSC and State Water Resources Control Board (SWRCB). Cal/EPA has implementation authority for the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) per CCR Title 27, Division 1, Subdivision 4, Chapter 1.

4.9.2.2.2 California Emergency Management Agency

The California Emergency Management Agency (Cal/EMA) was formed January 1, 2009, as the result of a merger between the Governor’s Office of Emergency Services (OES) and the Office of Homeland Security (OHS). The Hazardous Materials Unit of the Cal/EMA is responsible for hazmat emergency planning and response, spill release and notification, and hazmat enforcement of the Unified Program.

4.9.2.2.3 Department of Toxic Substances Control

Under Government Code Section 65962.5(a), the DTSC is required to compile and update as appropriate, but at least annually, and submit to the Secretary for Environmental Protection a list of all of the following: 1) All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code. 2) All land designated as hazardous waste property or border zone property pursuant to Article 11 (commencing with Section 25220) of Chapter 6.5 of Division 20 of the Health and Safety Code.

4.9.2.2.4 Division of California Occupational Safety and Health, Department of Industrial Relations

The Division of California Occupational Safety and Health protects workers and the public from safety hazards (CCR Title 8).

4.9.2.2.5 California State Hazard Mitigation Plan

The 2018 California State Hazard Mitigation Plan (SHMP) represents the state’s primary hazard mitigation guidance document. The 2018 SHMP continues to build upon the state’s commitment to reduce or eliminate potential risks and impacts of natural and human-caused disasters to help communities with their mitigation and disaster resiliency efforts. The 2018 plan includes: an updated statewide risk assessment, disaster history, and statistics; recent mitigation progress, success stories, and best practices; updated state hazard mitigation goals, objectives, and strategies; and updated climate mitigation progress and adaptation strategies. FEMA approved California’s 2018 SHMP on September 28, 2018.

4.9.2.2.6 California Public Utilities Commission General Order 95

General Order 95 (GO 95) contains requirements and specifications for overhead electrical line construction. These requirements are intended to ensure safety to workers engaged in the construction, O&M, and use of electrical facilities. The regulations are also intended to ensure the general reliability of the state’s utility infrastructure and services. Rule 35 of GO 95 establishes minimum clearances between line conductors and nearby vegetation for fire prevention purposes. These minimum clearances must be maintained through tree trimming prior to construction and throughout O&M of utility facilities.

4.9.2.2.7 California Public Utilities Commission General Order 166

The purpose of the standards contained in GO 166 is to ensure that jurisdictional electric utilities are prepared for emergencies and disasters in order to minimize damage and inconvenience to the public which may occur as a result of electric system failures, major outages, or hazards posed by damage to electric distribution facilities. The standards require, among others, that each jurisdictional electric utility prepare an emergency response plan and update the plan annually; conduct annual emergency training and exercises using the utilities emergency response plan; and coordinate emergency plans with state and local public safety agencies.

4.9.2.2.8 Public Resources Code §§ 4292-4293

Public Resources Code (PRC) Section 4292 require a 10-foot clearance of any tree branches or ground vegetation from around the base of power poles carrying more than 110 kV. The firebreak clearances required by PRC Section 4292 are applicable within an imaginary cylindrical space surrounding each pole or tower on which a switch, fuse, transformer or lightning arrester is attached and surrounding each dead-end or corner pole. PRC Section 4293 presents guidelines for line clearance including a minimum of 10 feet of vegetation clearance from any conductor operating at 110 kV or higher.

4.9.2.2.9 Health and Safety Code § 13009

Health and Safety Code Section 13009 permits the California Department of Forestry and Fire Protection (CALFIRE) to file civil actions to recover fire suppression costs from a party who causes a fire (1) negligently, or (2) in violation of a law or an order to correct a fire hazard. CAL FIRE established a Civil Cost Recovery (CCR) Program to satisfy the statute’s intent to assign financial responsibility to culpable parties and to prevent fires through deterrence.

4.9.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the IC Project. Pursuant to CPUC General Order 131-D (GO 131-D), Section XIV.B, “Local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the CPUC’s jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters.” Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the counties’ and cities’ regulations are not applicable as the counties and cities do not have jurisdiction over the IC Project. Accordingly, the following discussion of local land use regulations is provided for informational purposes only.

4.9.2.3.1 Certified Unified Program Agency

The CUPA is the agency certified by the DTSC to conduct the Unified Program. The program consists of hazardous waste generator and on-site treatment programs, aboveground and underground storage tank programs, Hazardous Materials Management, Business Plans, and Inventory Statements, and the Risk Management and Prevention Program.

4.9.2.3.2 Inyo County Environmental Health Department

The Inyo County Environmental Health Department, Hazardous Materials Program, is the CUPA responsible for administering the hazardous materials program within Inyo County.

4.9.2.3.3 Kern County Environmental Health Services Division

The Kern County Environmental Health Services Division is the CUPA responsible for administering the hazardous materials program within the Kern County.

4.9.2.3.4 San Bernardino County Fire Department

The San Bernardino County Fire Department, Hazardous Materials Division, is the CUPA responsible for administering the hazardous materials program within San Bernardino County.

4.9.2.3.5 Inyo County and City of Bishop Multi-Jurisdictional Hazard Mitigation Plan

The Inyo County and City of Bishop Multi-Jurisdictional Hazard Mitigation Plan (ICCB 2016) establishes a strategy for Inyo County to reduce hazard impacts. The Plan focuses on hazard mitigation in reducing the impacts of disasters by identifying effective and feasible actions to reduce the risks posed by potential hazards. The Plan develops mitigation actions to strengthen community resilience, which helps ensure coordinated and consistent hazard mitigation activities across Inyo County. The County and the City have developed this Plan to be consistent with current standards and regulations, ensuring that the understanding of hazards facing the communities reflects best available science and current conditions. The Plan is also consistent with Federal Emergency Management Agency (FEMA) requirements.

4.9.2.3.6 Kern Multi Jurisdiction Hazard Mitigation Plan

Kern County and several participating jurisdictions prepared in 2012 a Comprehensive Update to the Multi Jurisdiction Hazard Mitigation Plan (MHMP), originally approved by the Federal Emergency Management Agency (FEMA) in 2006. The purpose of this plan is to guide hazard mitigation planning to better protect the people and property of the County from the effects of hazard events. The plan demonstrates the commitment of each participating jurisdiction to reducing risks from hazards and serves as a tool to help decision makers direct mitigation activities and resources.

4.9.2.3.7 San Bernardino County Multi-Jurisdictional Hazard Mitigation Plan

The purpose of the Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) is to demonstrate the plan for reducing and/or eliminating risk in the unincorporated area of the County and within areas overseen or managed by the Flood Control District, Fire District and Special Districts Department. The MJHMP process encourages communities within the unincorporated county to develop goals and projects that will reduce risk and build a more disaster resilient community by analyzing potential hazards.

4.9.3 Significance Criteria

4.9.3.1 California Environmental Quality Act (CEQA)

The significance criteria for assessing the impacts to hazards and hazardous materials come from the California Environmental Quality Act (CEQA) Environmental Checklist. According to the CEQA Checklist, a project causes a potentially significant impact if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school
- Be located on a site that is included on a list of hazardous material sites, compiled pursuant to Government Code Section 65962.5, and as a result would create a significant hazard to the public or the environment
- For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, the Proposed Project would result in a safety hazard for people residing or working in the Proposed Project area
- For a project within the vicinity of a private airstrip, the Proposed Project would result in a safety hazard for people residing or working in the Proposed Project area

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands

4.9.4 Impact Analysis

4.9.4.1 Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

4.9.4.1.1 Construction

Less than Significant Impact with Mitigation. No acutely hazardous materials would be used or stored on location during construction of the IC Project. Construction of the IC Project would require the use of gasoline, diesel fuel, oil, solvents, and lubricants associated with vehicles and construction activities. Hazardous materials management would include compliance with a project-specific SWPPP and a spill prevention, control, and countermeasures (SPCC) Plan, if necessary, and implementation of best management practices (BMPs) related to fueling and the handling, use and storage of hazardous materials. All transport of hazardous materials would comply with applicable laws, rules, and regulations, and would use applicable BMPs, including the acquisition of required shipping papers, package marking, labeling, transport vehicle placarding, training, and registrations. SCE crews and/or SCE's construction contractor would implement proper hazardous materials management activities, which would include preparation and implementation of plan(s) such as a hazardous materials management plan for the IC Project, before field construction activities begin that would outline the proper procedures for the handling, use, storage, and disposal of hazardous materials.

An inadvertent release could also occur from the use of hazardous materials during construction within temporary storage sites, while transporting hazardous materials to and from work areas, or during refueling and servicing of equipment. However, a IC Project-specific Hazardous Materials Management Plan (HMMP), as specified in APM HAZ-1, would be prepared and implemented throughout construction of the IC Project. The plan would include safety information regarding the transport, use, and disposal of hazardous materials. In addition, all transport, use, and disposal of hazardous materials would be in compliance with applicable laws, rules, and regulations.

Depending on the type, condition, and original chemical treatment, any wood poles removed would be returned to a material yard and either reused by SCE, returned to the manufacturer, disposed of in a Class I hazardous waste landfill, or in a RWQCB-approved Class III landfill or equivalent facility.

All hazardous materials would be transported, used, and disposed of in accordance with applicable rules, regulations, and SCE standard protocols designed to protect the environment, workers, and the public. Implementation of APM HAZ-1 would result in less than significant impacts.

4.9.4.1.2 Operations

No Impact. As presented in Chapter 3, SCE is currently performing operation and maintenance (O&M) activities, including inspections, along the subtransmission lines that would be rebuilt and reconducted under the IC Project. No material changes in O&M activities or the locations of these activities are anticipated with implementation of the IC Project, and therefore no impacts would be realized under this criterion during operations and maintenance.

4.9.4.2 Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

4.9.4.2.1 Construction

Less than Significant Impact. Construction of the IC Project would require the limited use of hazardous materials, such as fuels, lubricants, and cleaning solvents. As described in Chapter 3, fuel storage and refueling of vehicles helicopters may occur in designated areas during construction activities. A small volume of fuels, lubricants, and solvents with low toxicity are anticipated to be used during the construction of the IC Project. All hazardous materials would be stored, handled, and used in accordance with applicable regulations, and safety data sheets (SDS) would be available. The most likely incidents involving these hazardous materials are associated with minor spills or drips.

A site-specific construction SWPPP would be prepared and followed, as applicable, to ensure quick response to minor spills and minimal impacts to the environment. The SWPPP would identify the locations for storing hazardous materials during construction, as well as protective measures, notification, and cleanup requirements for any incidental spills or other potential releases of hazardous materials.

In the event of a release of hazardous materials, such as minor spills and drips from construction equipment and refueling, SCE would use the SWPPP as guidance for appropriate handling and response. In addition, implementation of the WEAP as described in Chapter 3 would provide site personnel with instruction on the SWPPP and site-specific BMPs, when applicable.

During construction, the potential exists that subsurface utilities (e.g., a natural gas line) or structures (e.g., an underground storage tank) might be encountered and damaged, resulting in a release of a hazardous material. During construction, screening activities would include contacting DigAlert, conducting visual observations, and using buried line locating equipment. In addition, SCE would develop and implement an HMMP per APM HAZ-1 to further reduce the risk of hazards to the public, workers, and the environment.

A low potential exists for contaminated soil to be encountered during excavation or other ground-disturbing activities. SCE would develop and implement a Soil Management Plan per APM HAZ-2. The Plan would direct that, if encountered, contaminated soil would be segregated, sampled, and tested to determine appropriate treatment and disposal options. If the soil is classified as hazardous, it would be properly managed on location and transported in accordance with the U.S. Department of Transportation regulations using a Uniform Hazardous Waste Manifest to a Class I Landfill or other appropriate soil treatment or recycling facility. Similarly, there is a low potential for encountering contaminated groundwater during excavation or other ground-disturbing activities. No contaminated groundwater underlying IC Project construction work areas was identified during the review of Envirostor and Geotracker data. If, however, potentially-contaminated groundwater is encountered, then groundwater samples would be collected and tested to determine appropriate treatment and disposal. Hazardous materials would be transported, used, and disposed of in accordance with applicable rules, regulations, and SCE standard protocols designed to protect the environment, workers, and the public.

SCE does not believe there is a reasonable risk of impacts associated with unexploded ordnance or heavy metal contamination within the boundaries of the Victorville Precision Bombing Range N-1 along Segment 3N or the Marine Corps Logistics Base, Barstow along Segment 3S. Transmission lines and other energy infrastructure, including the IC Project subtransmission lines, have been built through the Range and Base with no currently-known legacy hazards at the locations where these lines were installed.

Further, both areas are identified as having unlimited public access, indicating that the Department of Defense believes there is no risk to the public resulting from accessing the area. In addition, given the sparse population in the area, there is no reasonably foreseeable situation where a member of the public would be exposed to unexploded ordnance or materials hazards associated with construction within the Range or Base.

Based on small quantities of hazardous materials to be used during construction, implementation of project-related training and procedures, and absence of known contaminated sites in locations where the IC Project would be constructed, less than significant impacts are anticipated during construction of the IC Project. Implementation of APMs HAZ-1 and HAZ-2 would further reduce these less than significant impacts.

4.9.4.2.2 Operations

No Impact. As presented in Chapter 3, SCE is currently performing operation and maintenance (O&M) activities, including inspections, along the subtransmission lines that would be rebuilt and reconducted under the IC Project. No material changes in O&M activities or the locations of these activities are anticipated with implementation of the IC Project, and therefore no impacts would be realized under this criterion during operations and maintenance.

4.9.4.3 Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

4.9.4.3.1 Construction

Less than Significant Impact. Four schools in the community of Baker are located within 0.25 miles of the IC Project Alignment. Hazardous materials to be used during the construction of the IC Project would consist of low-toxicity materials including gasoline, diesel fuel, oil, solvents, and lubricants associated with the construction equipment and vehicles and construction activities. The low-toxicity materials would be used at all IC Project construction sites. All hazardous materials would be stored, handled, and used in accordance with applicable regulations. No acutely hazardous materials (as defined in Tit. 22 Cal. Code Regs. § 66260.10) would be used or stored on location during construction activities.

Due to the low toxicity of materials associated with the IC Project, and implementation of a construction SWPPP that would include good housekeeping, spill containment and response measures, and waste management BMPs, impacts would be less than significant. Implementation of APM HAZ-1 would further reduce these less than significant impacts.

4.9.4.3.2 Operations

No Impact. As presented in Chapter 3, SCE is currently performing operation and maintenance (O&M) activities, including inspections, along the subtransmission lines that would be rebuilt and reconducted under the IC Project. No material changes in O&M activities or the locations of these activities are anticipated with implementation of the IC Project, and therefore no impacts would be realized under this criterion during operations and maintenance.

4.9.4.4 Would the project 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?

4.9.4.4.1 Construction

Less than Significant Impact with Mitigation. The IC Project would be constructed in part on a site that is currently identified on a list compiled pursuant to Government Code Section 65962.5. The SCE Coolwater Generating Station was the site of a release to soil that has been remediated; in 2014, DTSC deemed no further action was needed at this location and the site was approved for unrestricted land use. (DTSC 2014)

In addition, a short (~0.25 mile long) portion of Segment 1 traverses, or is immediately adjacent to, the Jorgensen Reduction Plant site, a tungsten ore processing plant which operated from the early 1940s to the mid-1950s. DTSC records indicate evaluation is needed associated with the historical operation of this facility. Components of the IC Project may be constructed within the affected area of this facility. SCE would develop and implement a Soil Management Plan as described in APM HAZ-2 to ensure the appropriate identification, sampling, management, and disposal of potentially contaminated soils. If the soil is classified as hazardous, the soil would be properly profiled, manifested, and transported to a Class I landfill or other appropriate soil treatment or recycling facility. Given implementation of these protocols and APM HAZ-2, less than significant impacts are anticipated from construction of the IC Project.

4.9.4.4.2 Operations

No Impact. As presented in Chapter 3, SCE is currently performing operation and maintenance (O&M) activities, including inspections, along the subtransmission lines that would be rebuilt and reconducted under the IC Project. No material changes in O&M activities or the locations of these activities are anticipated with implementation of the IC Project, and therefore no impacts would be realized under this criterion during operations and maintenance.

4.9.4.5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Proposed Project result in a safety hazard for people residing or working in the Proposed Project area?

4.9.4.5.1 Construction

Less than Significant Impact. Portions of the IC Project Alignment in Segment 1 traverse areas addressed in the Inyo County Airport Hazard Overlay District and Kern County Airport Land Use Compatibility Plan. In Segments 2 and 4, respectively, the IC Project Alignment is within two miles of, and crosses the plane of imaginary surfaces or airport land use plan buffers at, Inyokern Airport and Baker Airport.

While the IC Project would be constructed within two miles of public airports, the existing subtransmission infrastructure would be replaced in or immediately adjacent to the existing alignment. Prior to construction, SCE would submit the required Notice of Proposed Construction or Alteration to the FAA pursuant to Title 14 CFR, Section 77.9 for any replacement structures or alterations that require noticing.

Further, SCE would coordinate with local airports regarding helicopter operations and flight plans during project construction. Therefore, the impact would be less than significant.

4.9.4.5.2 Operations

No Impact. As presented in Chapter 3, SCE is currently performing operation and maintenance (O&M) activities, including inspections, along the subtransmission lines that would be rebuilt and reconducted under the IC Project. No material changes in O&M activities or the locations of these activities are anticipated with implementation of the IC Project, and therefore no impacts would be realized under this criterion during operations and maintenance.

4.9.4.6 For a project within the vicinity of a private airstrip, would the Proposed Project result in a safety hazard for people residing or working in the Proposed Project area?

4.9.4.6.1 Construction

No Impact. The IC Project Alignment is not located in the vicinity of a private airstrip; therefore, no impacts would occur under this criterion.

4.9.4.6.2 Operations

No Impact. The IC Project Alignment is not located in the vicinity of a private airstrip; therefore, no impacts would occur under this criterion.

4.9.4.7 Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

4.9.4.7.1 Construction

Less than Significant Impact. As discussed in Section 4.17, construction of the IC Project would not be expected to significantly impact traffic circulation or increase demands on existing emergency response services during temporary construction activities, and would not significantly impact emergency access in the area or increase the demand for existing emergency response services. Although it is not anticipated that construction activities would result in the blockage of any roadways that could be used in the case of an emergency, in the event that any construction-related activity may result in such a blockage or closure, SCE would implement APM TRA-1, which calls for coordination with local authorities including emergency responders regarding appropriate procedures. As directed in APM TRA-1, construction activities completed within public street rights-of-way would require the use of a traffic control service, and all lane closures would be conducted in accordance with APM TRA-1. The impacts associated with construction activities would be less than significant under this criterion.

4.9.4.7.2 Operations

No Impact. As presented in Chapter 3, SCE is currently performing operation and maintenance (O&M) activities, including inspections, along the subtransmission lines that would be rebuilt and reconducted under the IC Project. No material changes in O&M activities or the locations of these activities are anticipated with implementation of the IC Project, and therefore no impacts would be realized under this criterion during operations and maintenance.

4.9.4.8 Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

4.9.4.8.1 Construction

Less than Significant Impact. As previously discussed, the majority of the IC Project components are located within the CAL FIRE moderate fire hazard severity zone. Some IC Project components are located within the high and very high fire hazard severity zones, and in areas that are designated as non-wildland/non-urban land.

High heat or sparks from vehicles or equipment have the potential to ignite dry vegetation and cause fires. However, IC Project construction activities would generally be located within existing SCE owned and/or to-be-acquired ROWs where vegetation would be cleared or trimmed. Vehicles and equipment would primarily use existing roads, and would also use an overland travel method in temporary construction areas containing vegetation. SCE would comply with applicable laws and regulations related to fire protection. SCE further would develop and implement a Fire Prevention and Emergency Response Plan per APM HAZ-3; this Plan would include standard fire prevention protocols.

In the event that the National Weather Service issues a Red Flag Warning during construction of the IC Project, additional measures would be implemented to address smoking and fire rules, storage and parking areas, the use of gasoline-powered tools, the use of spark arresters on construction equipment, road closures, the use of a fire guard, fire suppression tools, fire suppression equipment, and training requirements. The portions of the IC Project located within moderate to very high fire hazard severity zones would generally be grubbed/trimmed of vegetation and graded before the staging of equipment, thereby minimizing the potential for vehicles or equipment to start a fire. As a result of these measures, construction of the IC Project would have a less than significant impact to the risk of loss, injury, or death involving wildland fires.

Within California, SCE participates with CAL FIRE, the California Governor's OES, and various city and county fire agencies in the Red Flag Fire Prevention Program, and complies with California PRC Sections 4292 and 4293 related to vegetation management in subtransmission line corridors. The portions of the IC Project located within moderate or high fire hazard severity zones would generally be cleared of vegetation and graded prior to the staging of equipment, minimizing the risk of construction vehicles starting a fire. Based on SCE's participation in the Red Flag Fire Prevention Program and compliance with applicable state and federal laws and regulations during construction, impacts resulting from wildland fire would be less than significant.

4.9.4.8.2 Operations

No Impact. As presented in Chapter 3, SCE is currently performing operation and maintenance (O&M) activities, including inspections, along the subtransmission lines that would be rebuilt and reconducted under the IC Project. No material changes in O&M activities or the locations of these activities are anticipated with implementation of the IC Project, and therefore no impacts would be realized under this criterion during operations and maintenance.

4.9.5 Applicant Proposed Measures

The following APMs would be implemented to reduce hazards or hazardous materials impacts associated with the IC Project:

- HAZ-1: Prepare a Hazardous Materials Management Plan
- HAZ-2: Prepare a Soil Management Plan
- HAZ-3: Prepare and Implement a Fire Management Plan.

The full text of these APMs is presented in Section 5.1.

4.9.6 Alternatives

Alternatives to the IC Project are addressed in Section 5.2, Description of Project Alternatives and Impact Analysis.

4.9.7 References

California Department of Forestry and Fire Protection (CALFIRE). 2018. California Fire Hazard Severity Zone Map Update Project. Maps available at http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps

California Department of Transportation (CALTRANS). 2018. California Manual on Uniform Traffic Control Devices. Available at <http://www.dot.ca.gov/trafficops/camutcd/>

California Inter-Utility Coordinating Committee. 2016. California Temporary Traffic Control Handbook. Available at <https://www.sce.com/nrc/aboutsce/regulatory/distributionmanuals/tcm.pdf>

City of Barstow. 2015. Emergency Operations Plan. Available at <http://www.barstowca.org/home/showdocument?id=4112>

Commander, Navy Installations Command (CNIC). 2017. Fire and Emergency Services Webpage. Available at https://www.cnic.navy.mil/regions/cnrsw/installations/naws_china_lake/om/fire_and_emergency_services.html

Department of Defense Environment, Safety and Occupational Health Network and Information Exchange (DENIX). 2019. Munitions Response Site (MRS) Inventory. Data available through <https://www.denix.osd.mil/mmrp/mrsi/home/>

Department of Toxic Substances Control (DTSC). 2018. Geotracker, Site 60 – B2 Spotting Tower 3 Quonset Hut (DOD100097200). Available online at https://geotracker.waterboards.ca.gov/profile_report?global_id=DOD100097200

DTSC. 2013a. Site Screening Assessment [Oriental Mill]. Available online at https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001830&enforcement_id=60320954

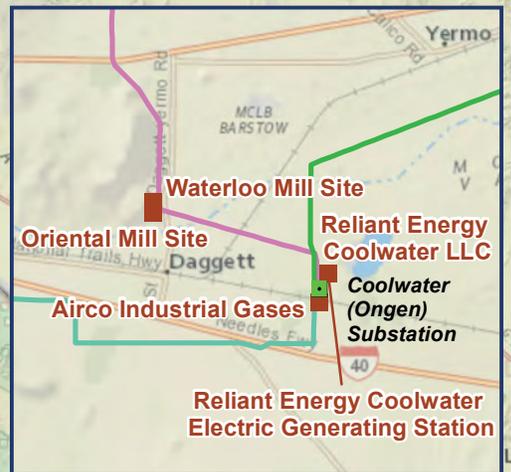
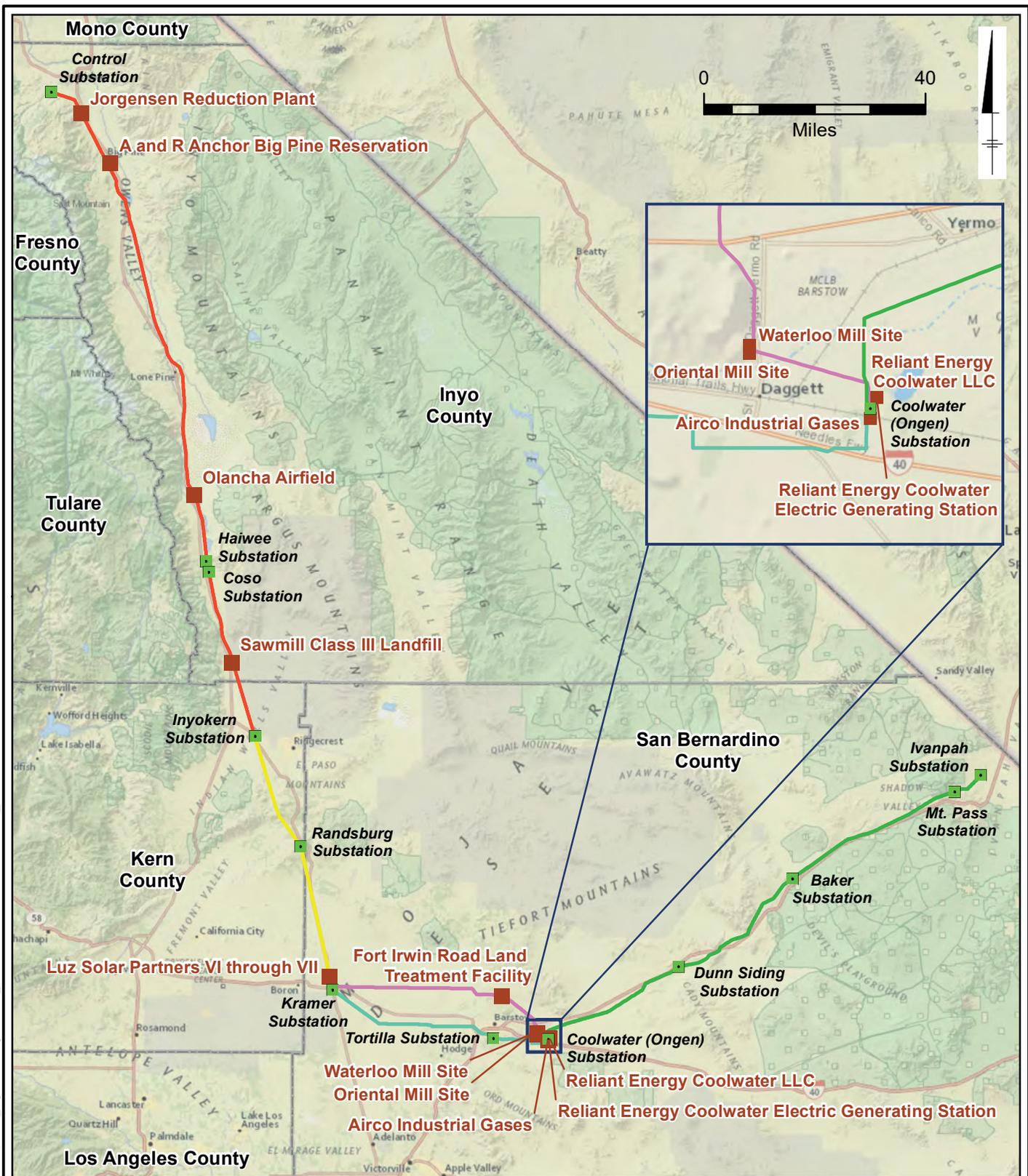
DTSC. 2013b. Site Screening Assessment [Waterloo Mill]. Available online at https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=60001831&enforcement_id=60313860

DTSC. 2014. Closure Certification Acknowledgement: Southern California Edison, Coolwater Generating Station Retention Basin Site, 37310 East Santa Fe Road, Dagget [sic], California 92327, San Bernardino County, EPA ID Number CAD 000 630 905. Available online at https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/8993443131/Coowater%20Closure%20Complete_140602.pdf

- Inyo County and City of Bishop (ICCB). 2016. Multi-Jurisdictional Hazard Mitigation Plan. Public Draft. Available at http://www.inyoplanning.org/documents/InyoCountyMJHMP_PublicDraft_Public_2016.07.26.pdf
- Inyo County. 1992. Memorandum Re: Big Pine Yard Underground Storage Tank Excavation. Available online at: https://geotracker.waterboards.ca.gov/site_documents/8533802628/Closure%20Ltr%206B1400654T.pdf
- Inyo County. 1994. Inyo County Code Chapter 18.62, AH Districts Airport Hazard Overlay. Available online at <http://www.qcode.us/codes/inyocounty/>
- Kern County. 2012. Airport Land Use Compatibility Plan. Available online at <https://www.kerncounty.com/planning/pdfs/ALUCP2012.pdf>
- Kern County Fire Department. 2012. Multi Jurisdiction Hazard Mitigation Plan Comprehensive Update 2012. Available online at <http://www.kerncountyfire.org/operations/divisions/office-of-emergency-services/emergency-plans/hazard-mitigation-plan.html>
- Kern County Fire Department. 2008. Emergency Operations Plan. Available online at <http://www.kerncountyfire.org/operations/divisions/office-of-emergency-services/emergency-plans/emergency-operations-plan.html>
- Lahontan Regional Water Quality Control Board. 2001. Board Order No. 6-01-14, WDID 6B14205501, Rescission of Waste Discharge Requirements, Board Order Nos. 6-93-10006, 6-81-16, 6,81-16A1, and 6-81-16A2.
- Lahontan Regional Water Quality Control Board. 2009. No Further Action Required for American Perlite, Tinemaha Creek, Big Pine, Inyo County, UST No. 6B1400282T. Available online at: https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/6177961051/American%20Perlite%20NFAR%206B1400282T.pdf
- Los Angeles Department of Water and Power. 2016. Comments on Solid Waste Facility Permit Revisions Applications Bishop Sunland Solid Waste Site 14-AA-0005, Independence Landfill 14-AA-0004, Lone Pine Landfill 14-AA-0003. Available online at: https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/3899218499/LADWP_CommentsInyoCntyRDSII5Mar16.pdf
- McGinley & Associates. 2014. Results of Phase II Environmental Site Assessment Activities, PPG Industries, 800 North Hwy 395, Cartago, CA 93526. January 15. Available online at https://geotracker.waterboards.ca.gov/regulators/deliverable_documents/5812803506/PPG%20Phase%20II%20ESA%20%206B1420006T%201-2014.pdf
- San Bernardino County. 2017. Multi-Jurisdictional Hazard Mitigation Plan Update. Available at http://cms.sbcounty.gov/portals/58/Documents/Emergency_Services/Hazard-Mitigation-Plan.pdf
- San Bernardino County Fire Department. 2013. San Bernardino County Emergency Operations Plan. Available online at http://cms.sbcounty.gov/portals/58/Documents/Emergency_Services/Emergency-Operations-Plan.pdf
- State Water Resources Control Board. 2015. GeoTracker. Fort Irwin Road Land Treatment (L10002793628). Available online at https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=L10002793628

- TRC. 2016. 2016 Annual Inspection of Soil Cover and Drainage Ditches BNSF – Former Ft. Irwin Road Landfarm, Barstow. Available at http://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5900916755/L10002793628.PDF
- USACE. 1999a. Defense Environmental Restoration Program Formerly Used Defense Sites Findings and Determination of Eligibility, Olancho Airfield, Olancho, California, Site No. J09CA742400. September 27. Available online at: https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/3971631705/CA7424A1_Olancho_Airfield.pdf
- USACE. 1999b. Defense Environmental Restoration Program Formerly Used Defense Sites Findings and Determination of Eligibility, Jorgensen Reduction Plant, Bishop, California, Site No. J09CA719300. Available online at https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/2423246085/CA7193A1_Jorgensen_Reduction_Plant.pdf
- USACE. 1995. Archives Search Report Findings: Victorville PBR N-1, Victorville PBR #2, Victorville PBR #7, and Victorville PBR #8. Defense Environmental Restoration Program for Formerly Used Defense Sites. Available at <http://www.militarymuseum.org/102193594-Victorville-Bombing-Range-No-1.pdf>
- USEPA. 2018. Enforcement and Compliance History Online Detailed Facility Report, A and R Anchor Big Pine Reservation. Available online at <https://echo.epa.gov/detailed-facility-report?fid=110012544130>
- USEPA. 2018a. RCRA Info Facility Information, Luz Solar Partners VI through VII. Available online at https://oaspub.epa.gov/enviro/rcrainfoquery.get_report?pgm_sys_id=CAD981620321
- USEPA. 2018b. RCRAInfo Facility Information, Sunray Energy 2, LLC. Available online at https://ofmpub.epa.gov/enviro/rcrainfoquery_3.facility_information?pgm_sys_id=CAR000256644
- USEPA. 2018c. RCRAInfo Facility Information, Southern California Edison Solar II. Available online at https://ofmpub.epa.gov/enviro/rcrainfoquery_3.facility_information?pgm_sys_id=CAR000008425
- USEPA. 2018d. TRI Facility Report, Airco Industrial Gases. Available online at http://ofmpub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=92327RCNDS36938
- USEPA. 2018e. TRI Facility Report, Reliant Energy Coolwater Electric Generating Station. Available online at http://ofmpub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=92327CLWTR37000
- USEPA. 2018f. Enforcement and Compliance History Online. Detailed Facility Report. Available online at <https://echo.epa.gov/detailed-facility-report?fid=110005994763>
- USEPA. 2018g. Enforcement and Compliance History Online. Detailed Facility Report. Available online at <https://echo.epa.gov/detailed-facility-report?fid=110001168986>

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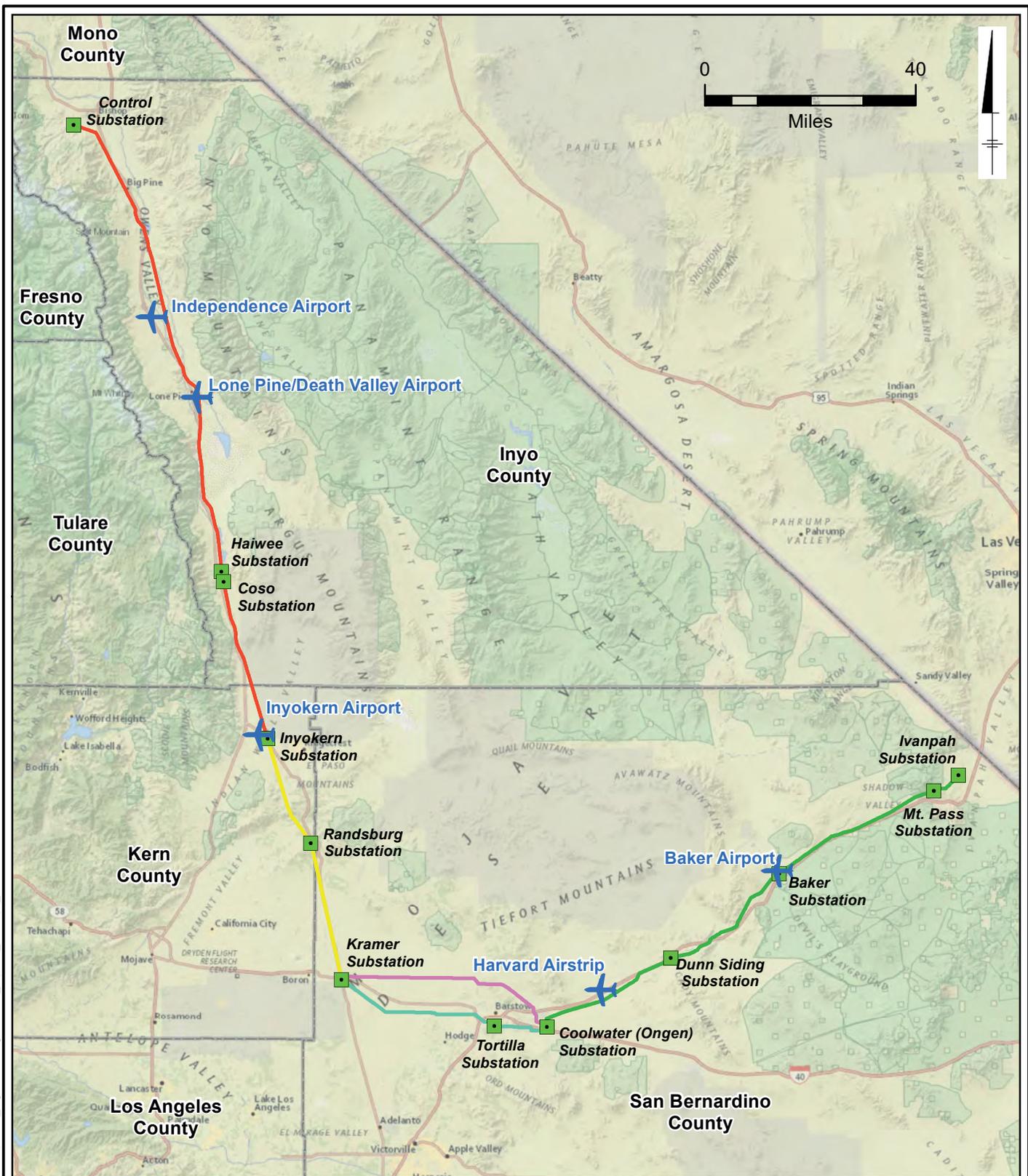


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- Substation
- Hazardous Material and Waste Sites
- County
- Segment 1
- Segment 2
- Segment 3N
- Segment 3S
- Segment 4

IVANPAH-CONTROL PROJECT	
HAZARDOUS MATERIAL AND WASTE SITES WITHIN 0.5 MILES OF THE IC PROJECT ALIGNMENT	
	FIGURE: 4.9-1

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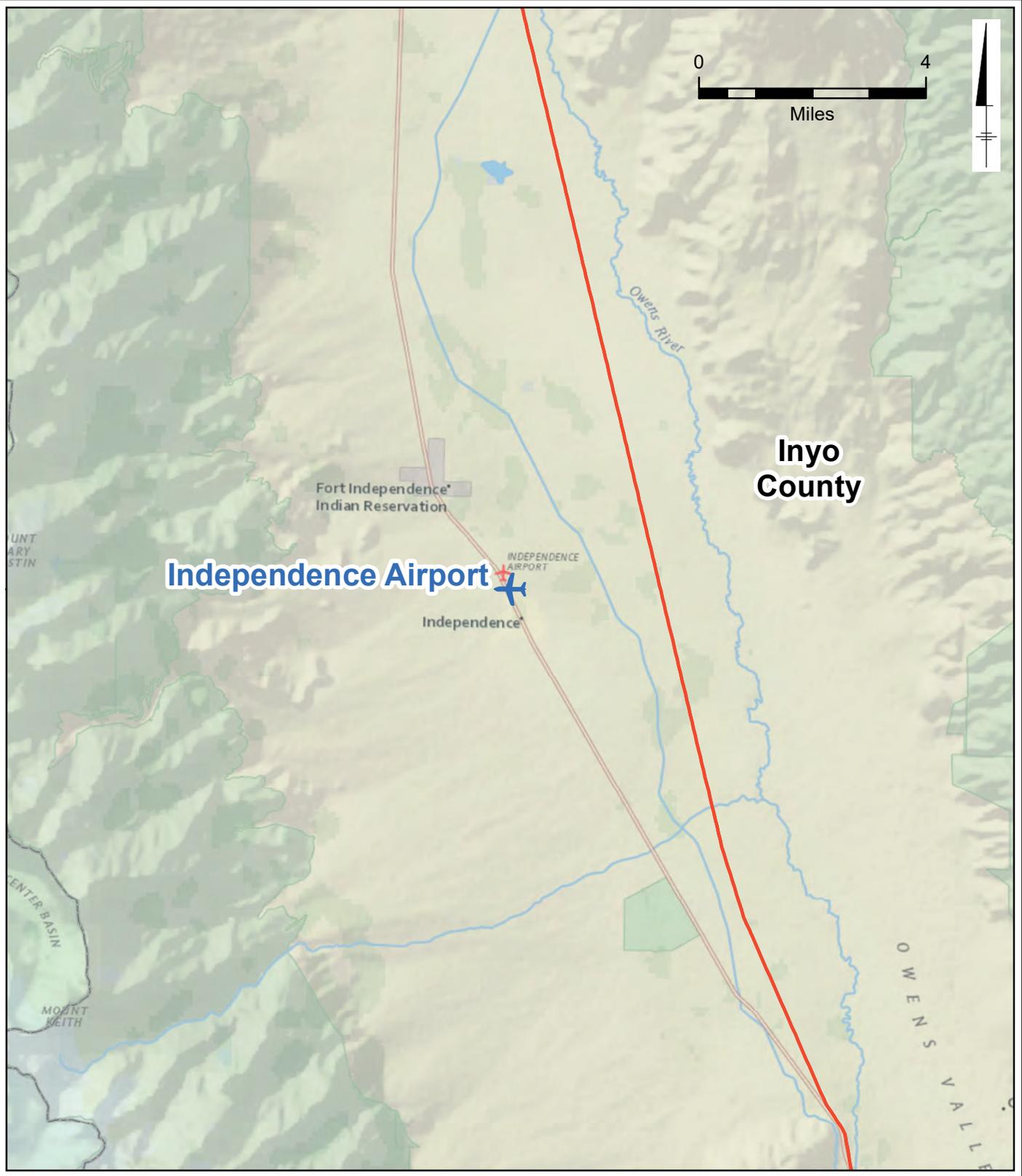


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-  Airport and Airstrip
-  Substation
-  County
-  Segment 1
-  Segment 2
-  Segment 3N
-  Segment 3S
-  Segment 4

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AIRPORTS AND AIRSTRIPS	
 	FIGURESET: 4.9-2

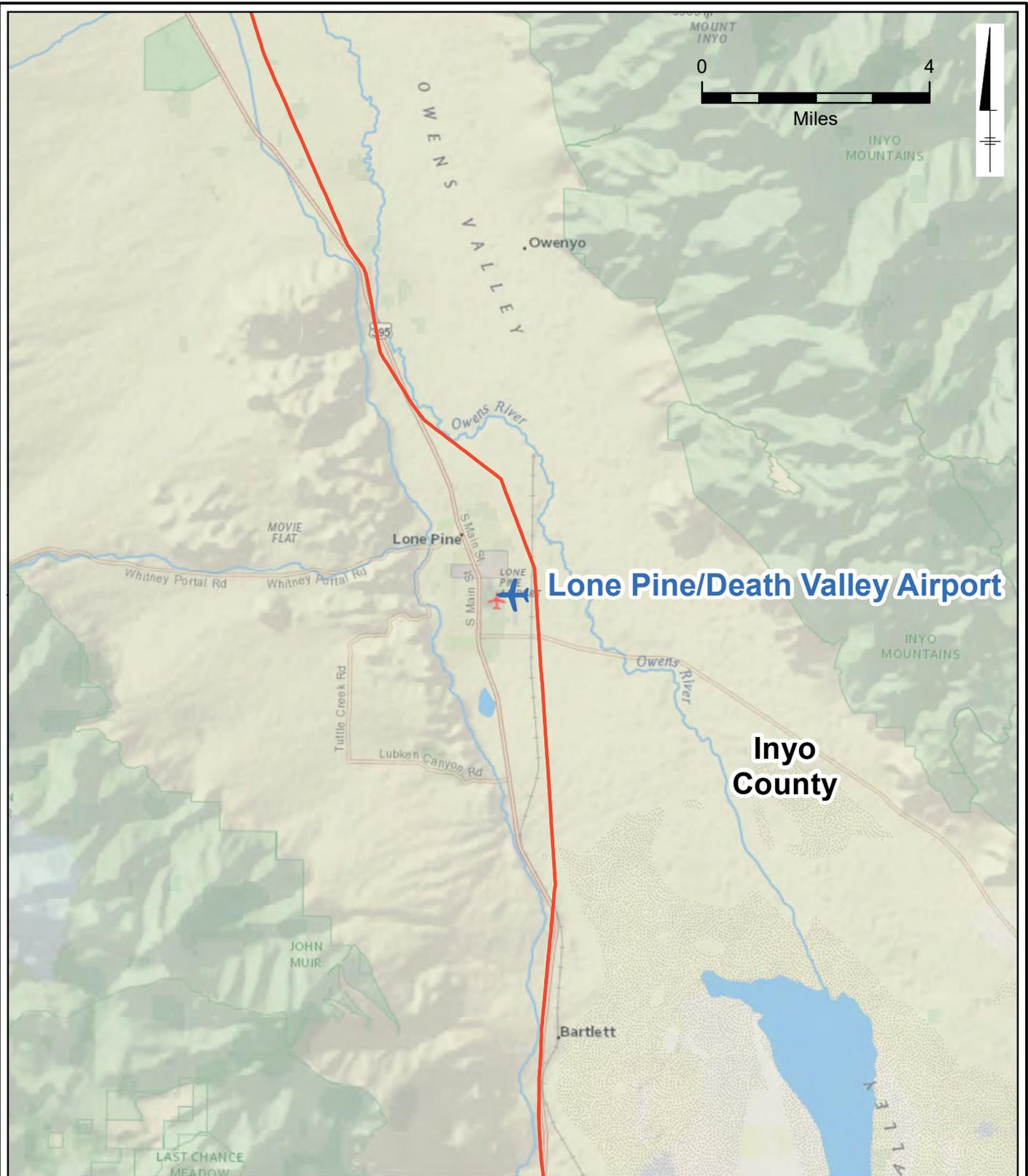
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-  Airport and Airstrip
-  Substation
-  County
-  Segment 1

IVANPAH-CONTROL PROJECT	
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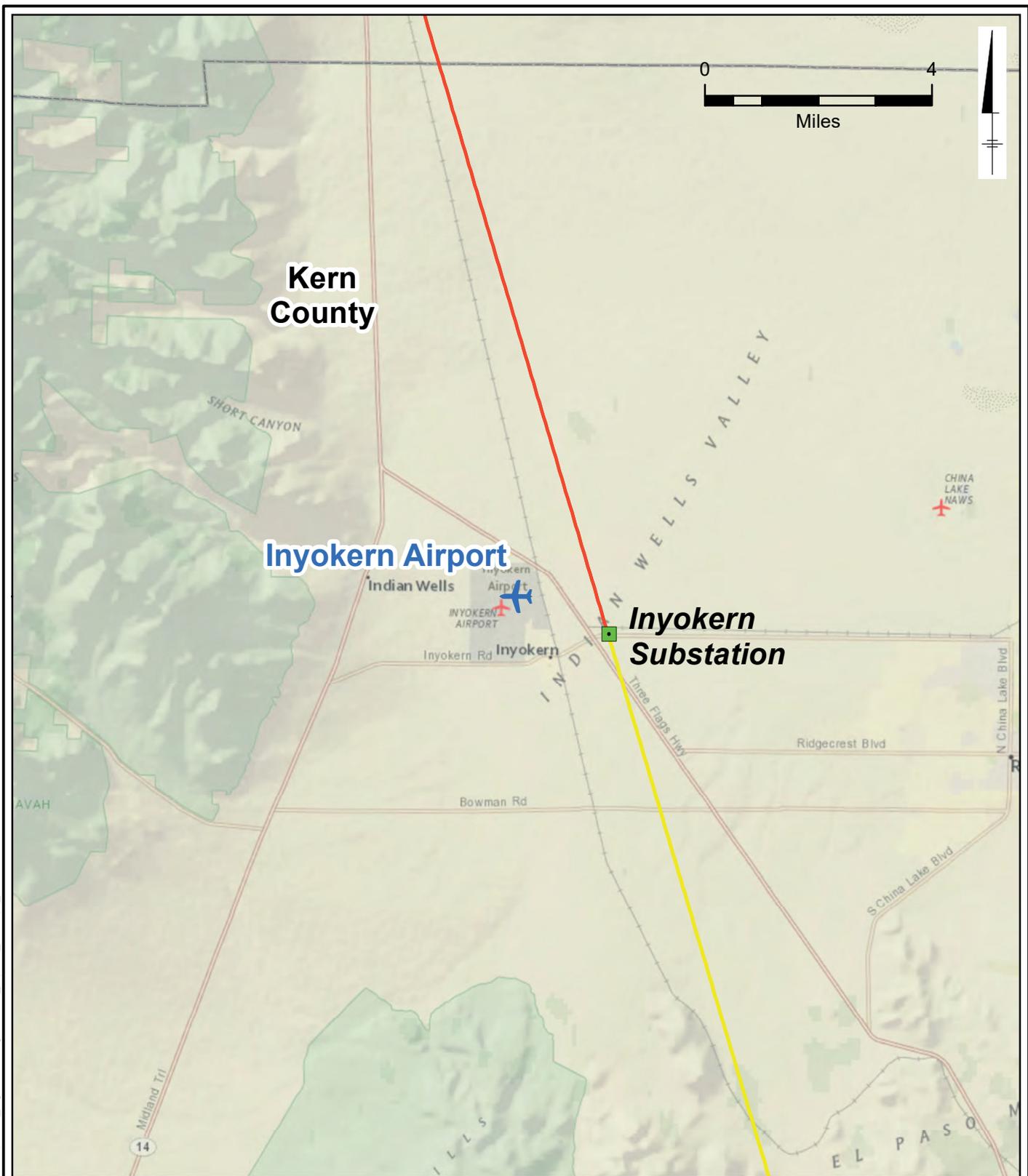
Lone Pine/Death Valley Airport

Inyo County

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-  Airport and Airstrip
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AIRPORTS AND AIRSTRIPS	
	
FIGURESET: 4.9-2	



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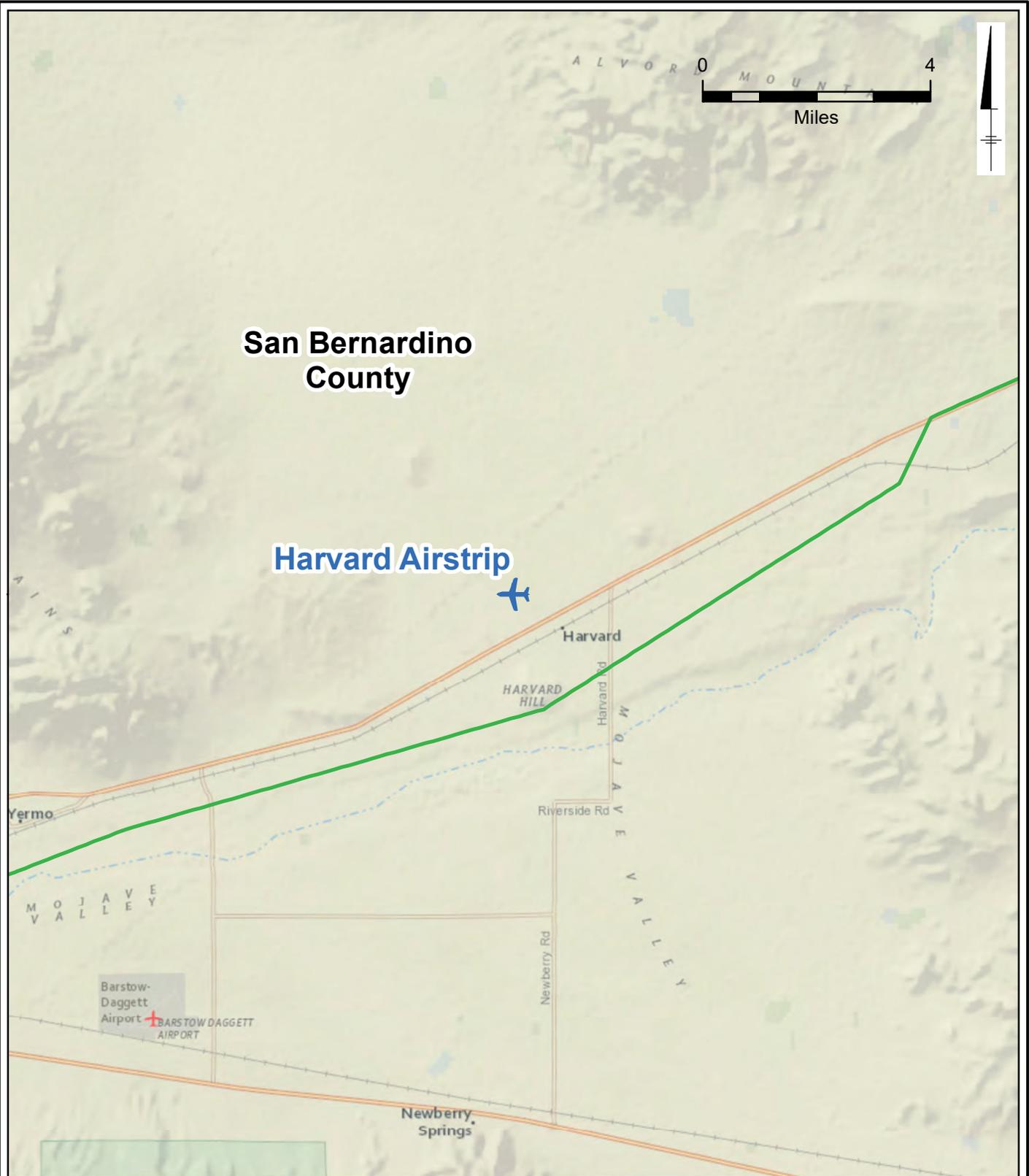
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Segment 1
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Segment 2
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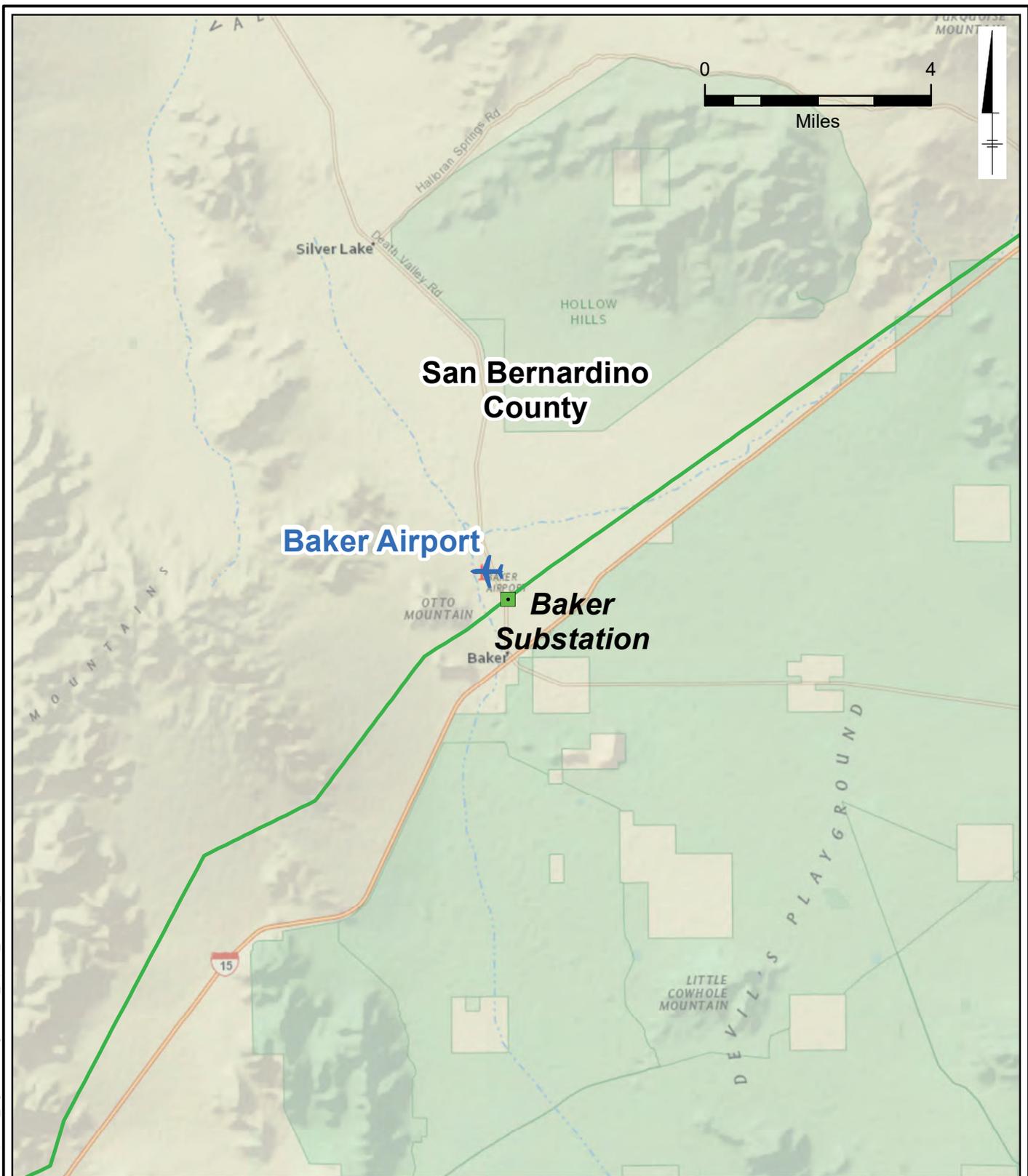
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-  Segment 4
-  Substation
-  County

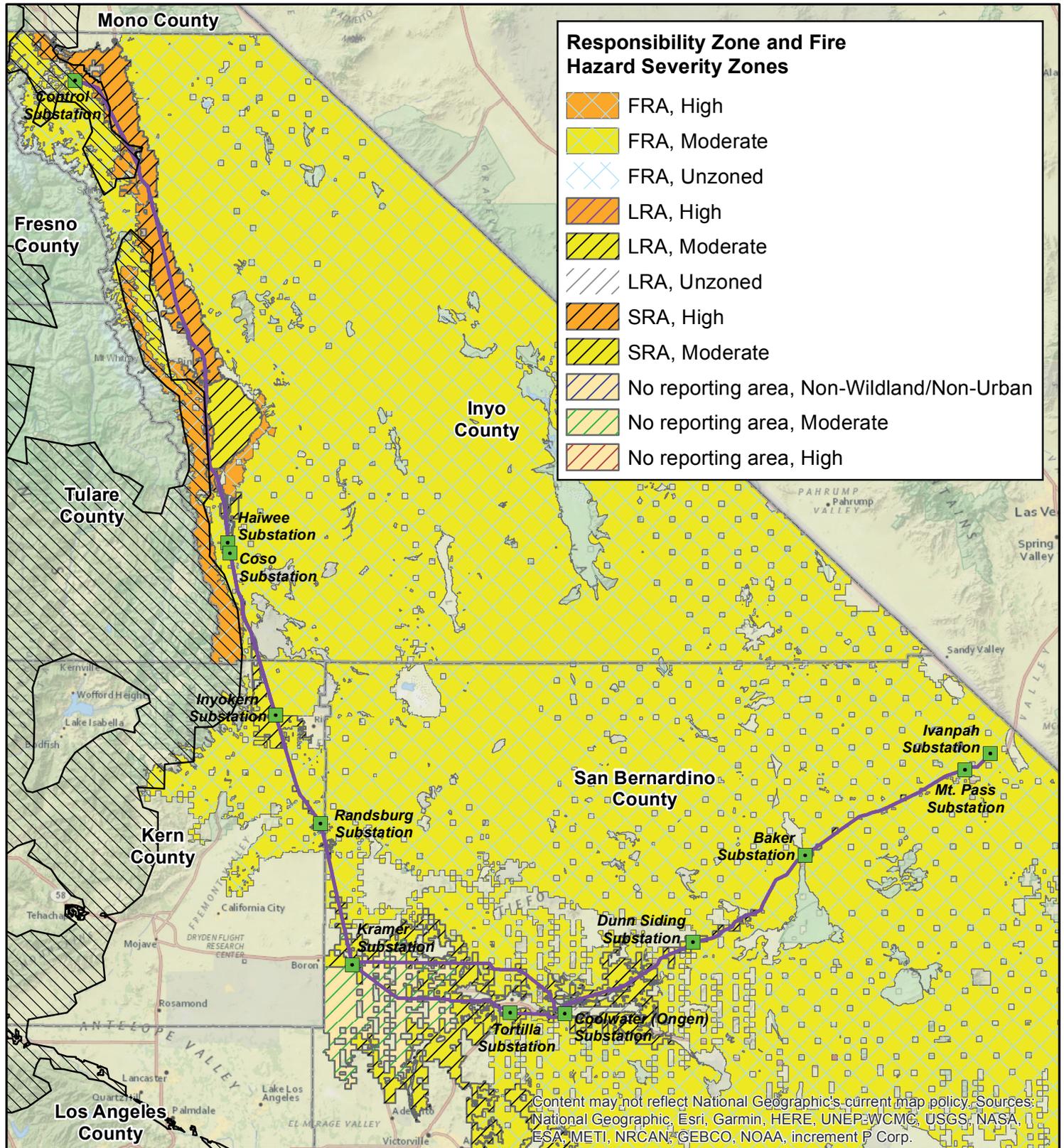
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AIRPORTS AND AIRSTRIPS	
	
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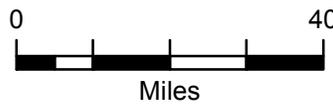
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-  Airport and Airstrip
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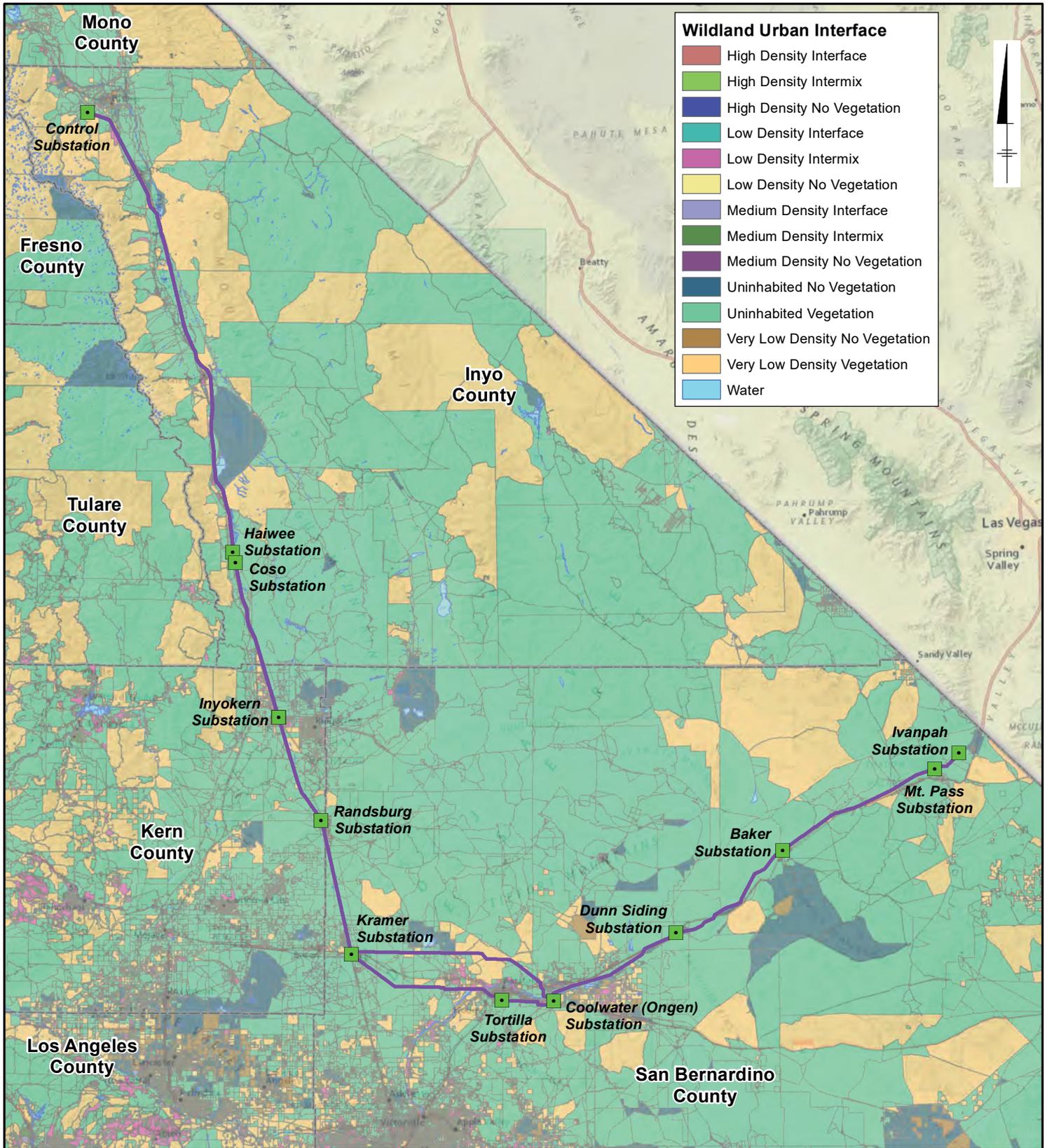
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IVANPAH-CONTROL PROJECT

FIRE HAZARD SEVERITY ZONES

FIGURE
4.9-3



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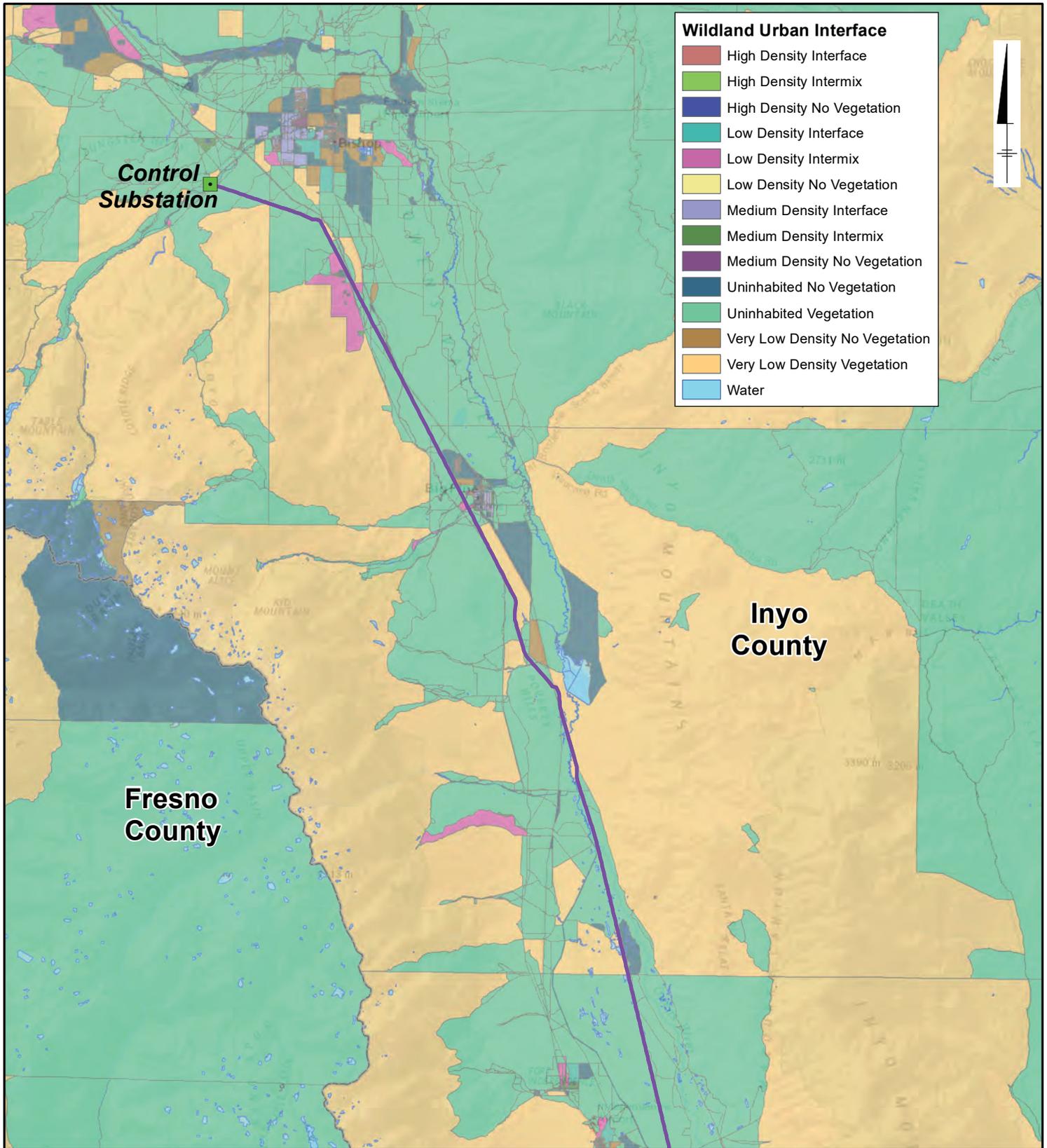
- Substation
- IC Project Alignment
- County



NOTES:
 (1) Wildland Urban Interface source: USDA Forest Service
<https://www.fs.usda.gov/rds/archive/Product/RDS-2015-0012-2>

IVANPAH-CONTROL PROJECT	
WILDLAND URBAN INTERFACE	
	FIGURESET: 4.9-4

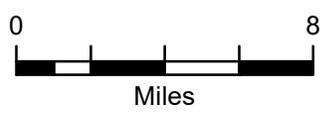
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- Wildland Urban Interface**
- High Density Interface
 - High Density Intermix
 - High Density No Vegetation
 - Low Density Interface
 - Low Density Intermix
 - Low Density No Vegetation
 - Medium Density Interface
 - Medium Density Intermix
 - Medium Density No Vegetation
 - Uninhabited No Vegetation
 - Uninhabited Vegetation
 - Very Low Density No Vegetation
 - Very Low Density Vegetation
 - Water

Legend

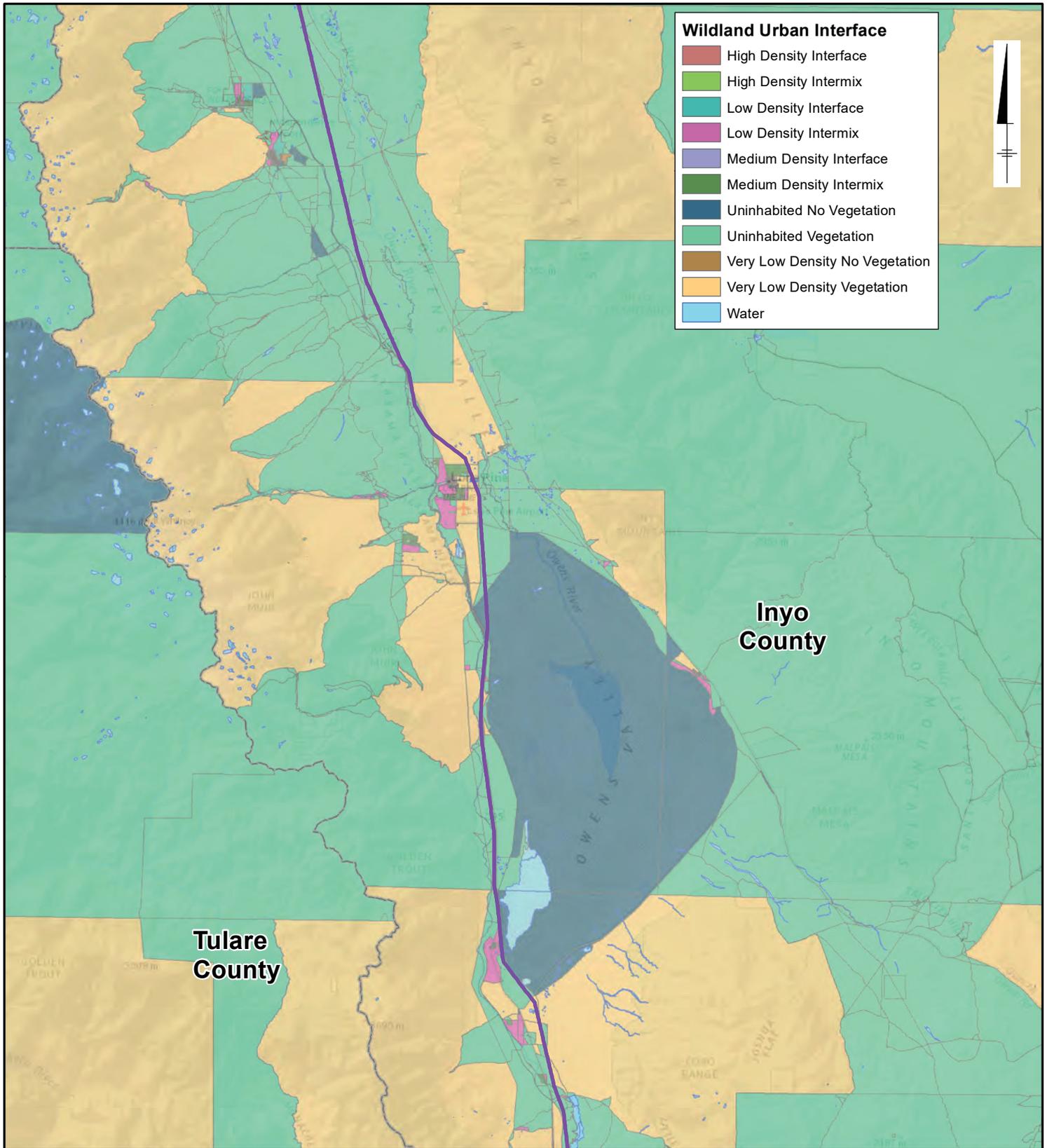
- Substation
- IC Project Alignment
- County



NOTES:
 (1) Wildland Urban Interface source: USDA Forest Service
<https://www.fs.usda.gov/rds/archive/Product/RDS-2015-0012-2>

IVANPAH-CONTROL PROJECT	
WILDLAND URBAN INTERFACE	
	 <small>An EDISON INTERNATIONAL Company</small>
FIGURESET: 4.9-4	

City: Div/Group: Created By: Last Saved By: ms01059
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Wildland Urban Interface

- High Density Interface
- High Density Intermix
- Low Density Interface
- Low Density Intermix
- Medium Density Interface
- Medium Density Intermix
- Uninhabited No Vegetation
- Uninhabited Vegetation
- Very Low Density No Vegetation
- Very Low Density Vegetation
- Water



Tulare County

Inyo County

Legend

- Substation
- IC Project Alignment
- County



NOTES:
 (1) Wildland Urban Interface source: USDA Forest Service
<https://www.fs.usda.gov/rds/archive/Product/RDS-2015-0012-2>

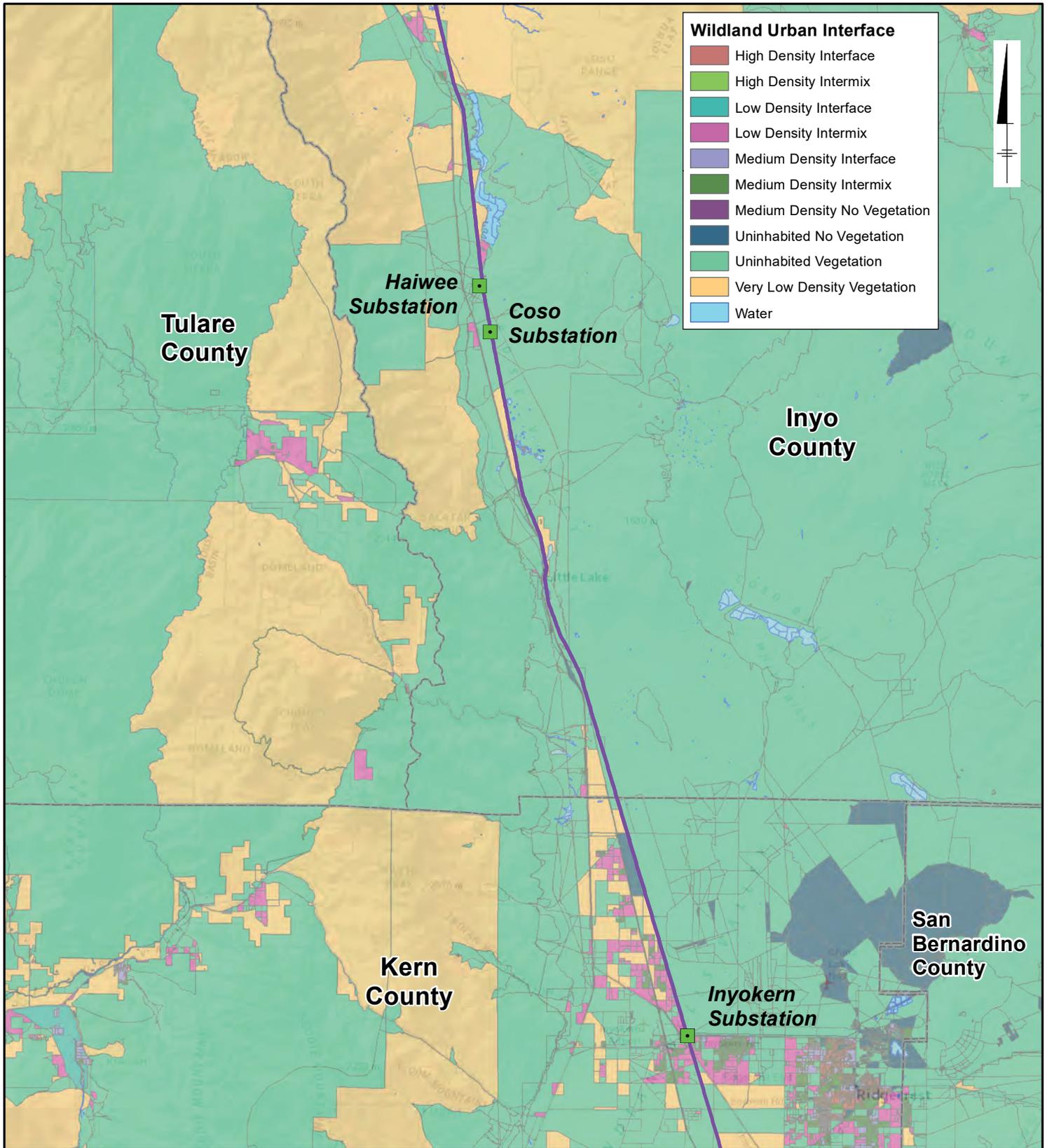
IVANPAH-CONTROL PROJECT

WILDLAND URBAN INTERFACE



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Legend

- Substation
- IC Project Alignment
- County



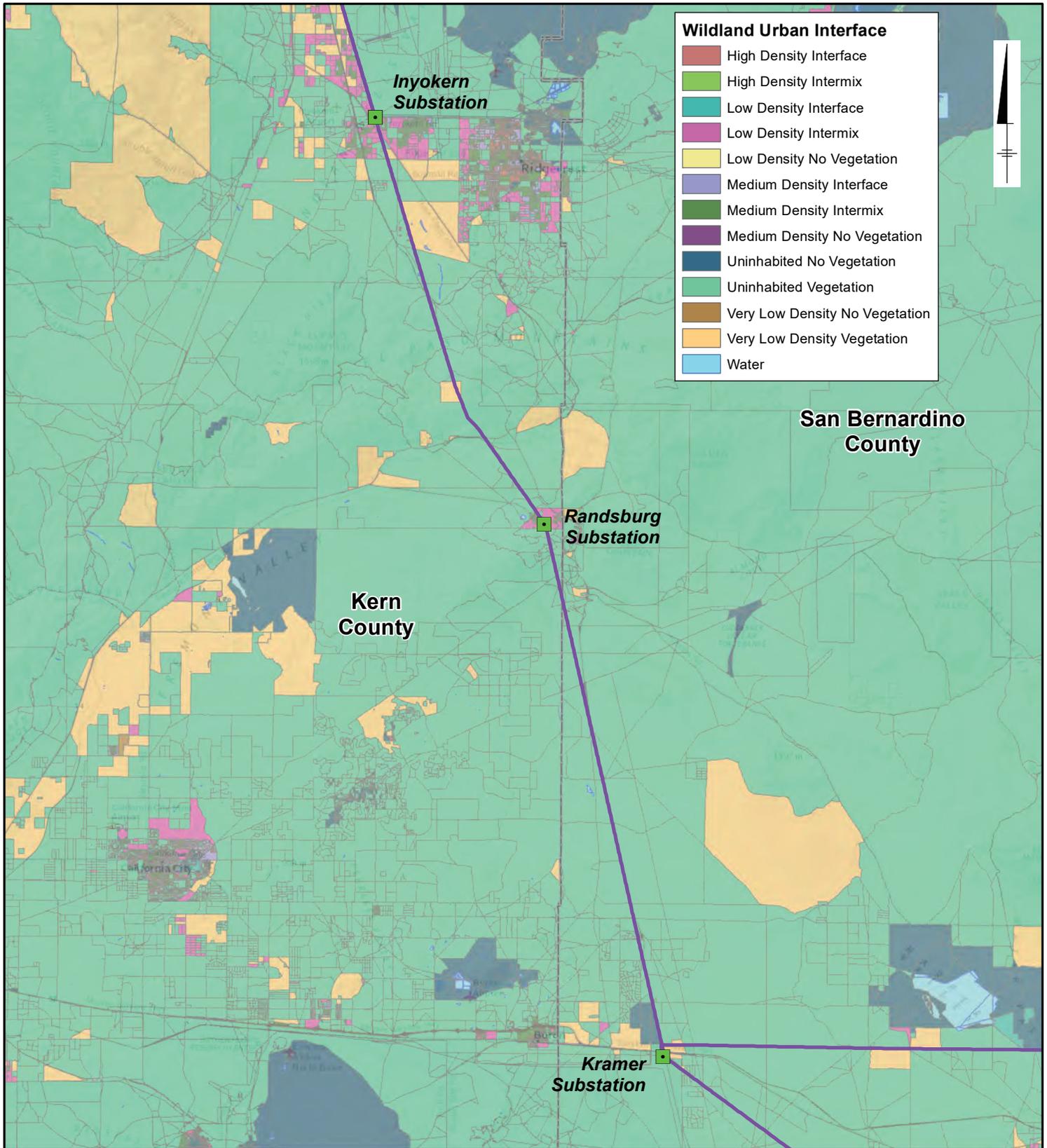
NOTES:
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IVANPAH-CONTROL PROJECT

WILDLAND URBAN INTERFACE

ARCADIS SOUTHERN CALIFORNIA EDISON
 An EDISON INTERNATIONAL Company

FIGURESET: 4.9-4



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Legend

- Substation
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- County

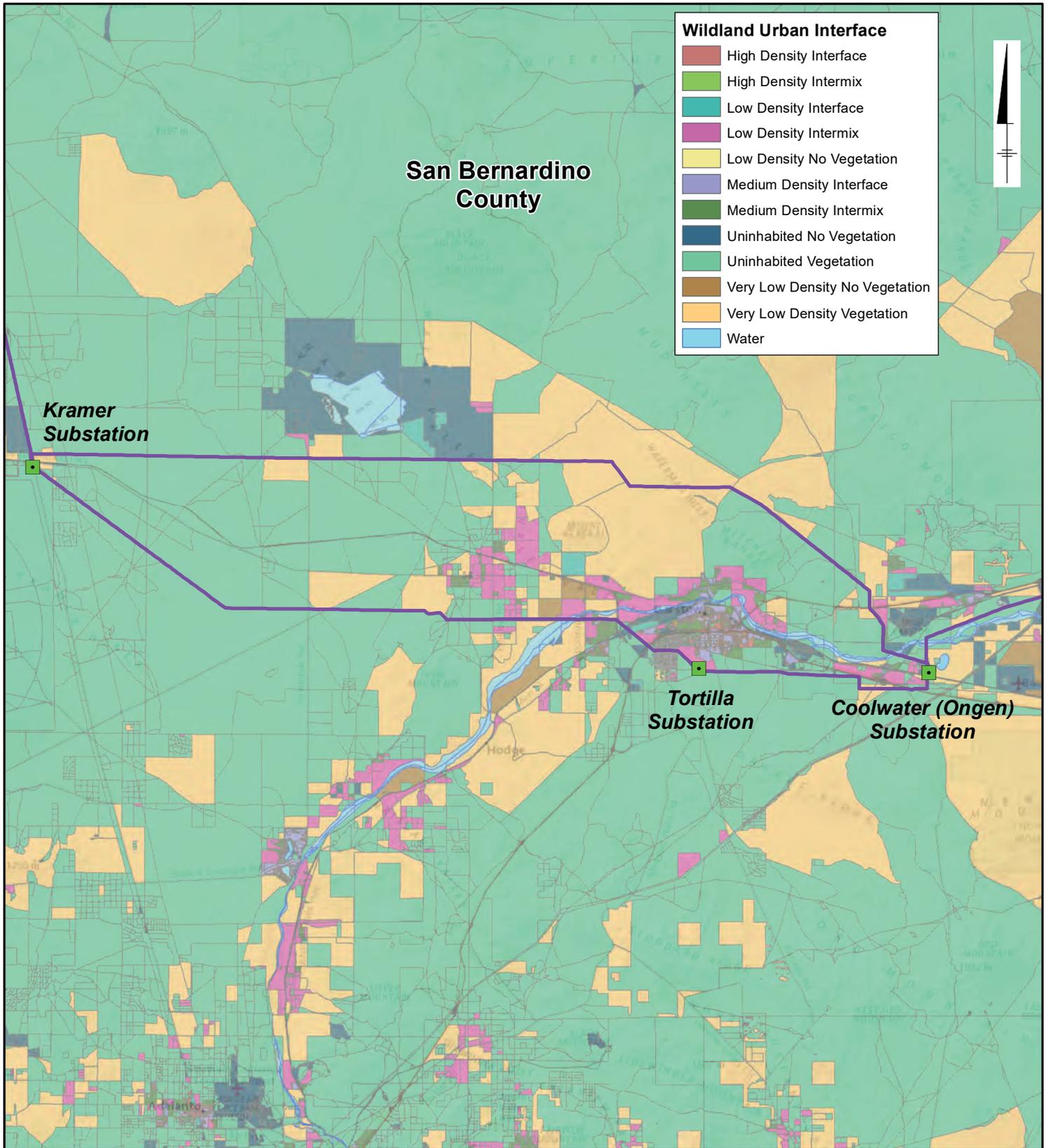


NOTES:
 (1) Wildland Urban Interface source: USDA Forest Service
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IVANPAH-CONTROL PROJECT

WILDLAND URBAN INTERFACE

FIGURESET:
4.9-4



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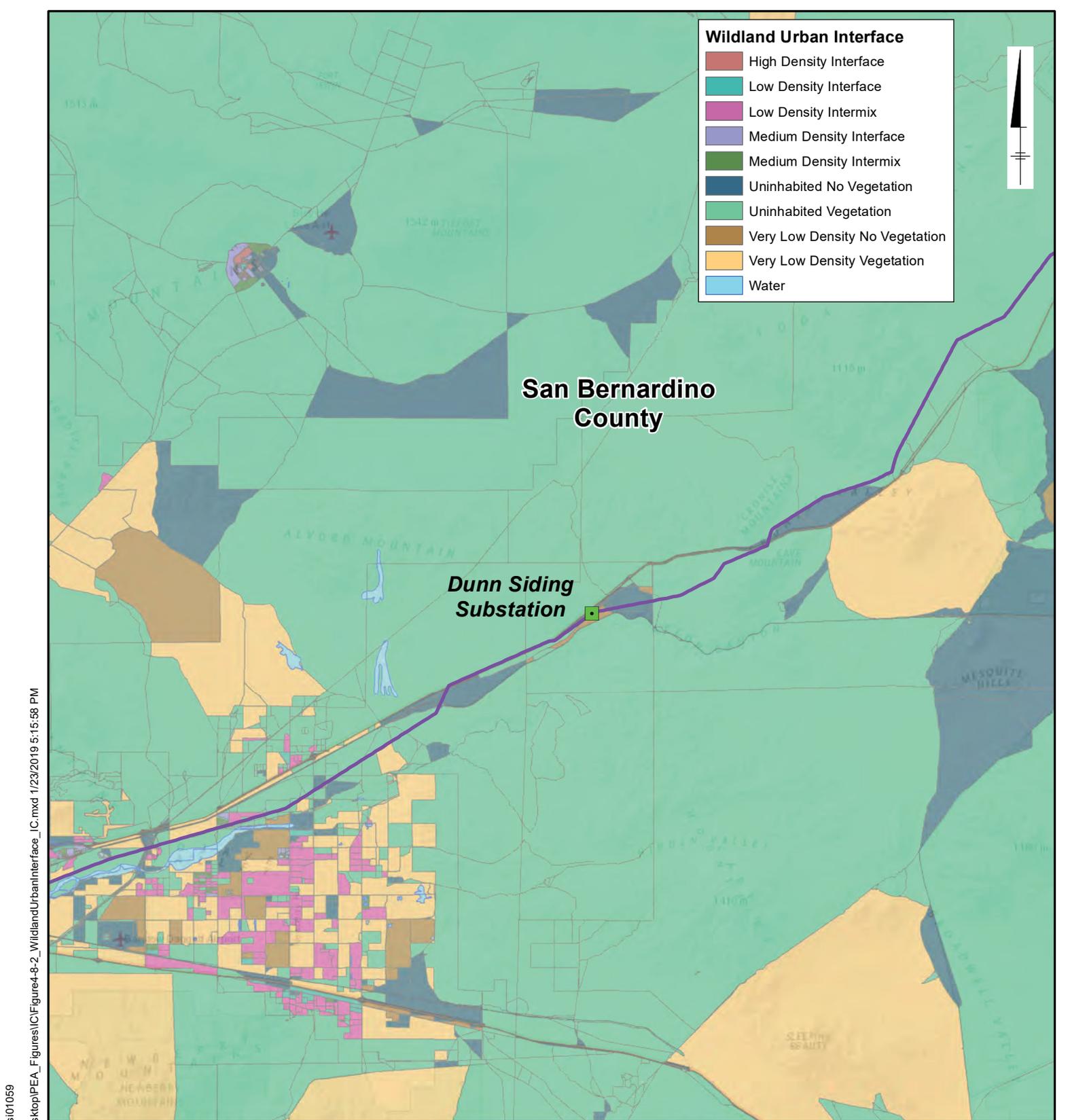


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WILDLAND URBAN INTERFACE

**FIGURESET:
4.9-4**



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San Bernardino County

Dunn Siding Substation

Legend

- Substation
- IC Project Alignment
- County



NOTES:
 (1) Wildland Urban Interface source: USDA Forest Service
<https://www.fs.usda.gov/rds/archive/Product/RDS-2015-0012-2>

IVANPAH-CONTROL PROJECT

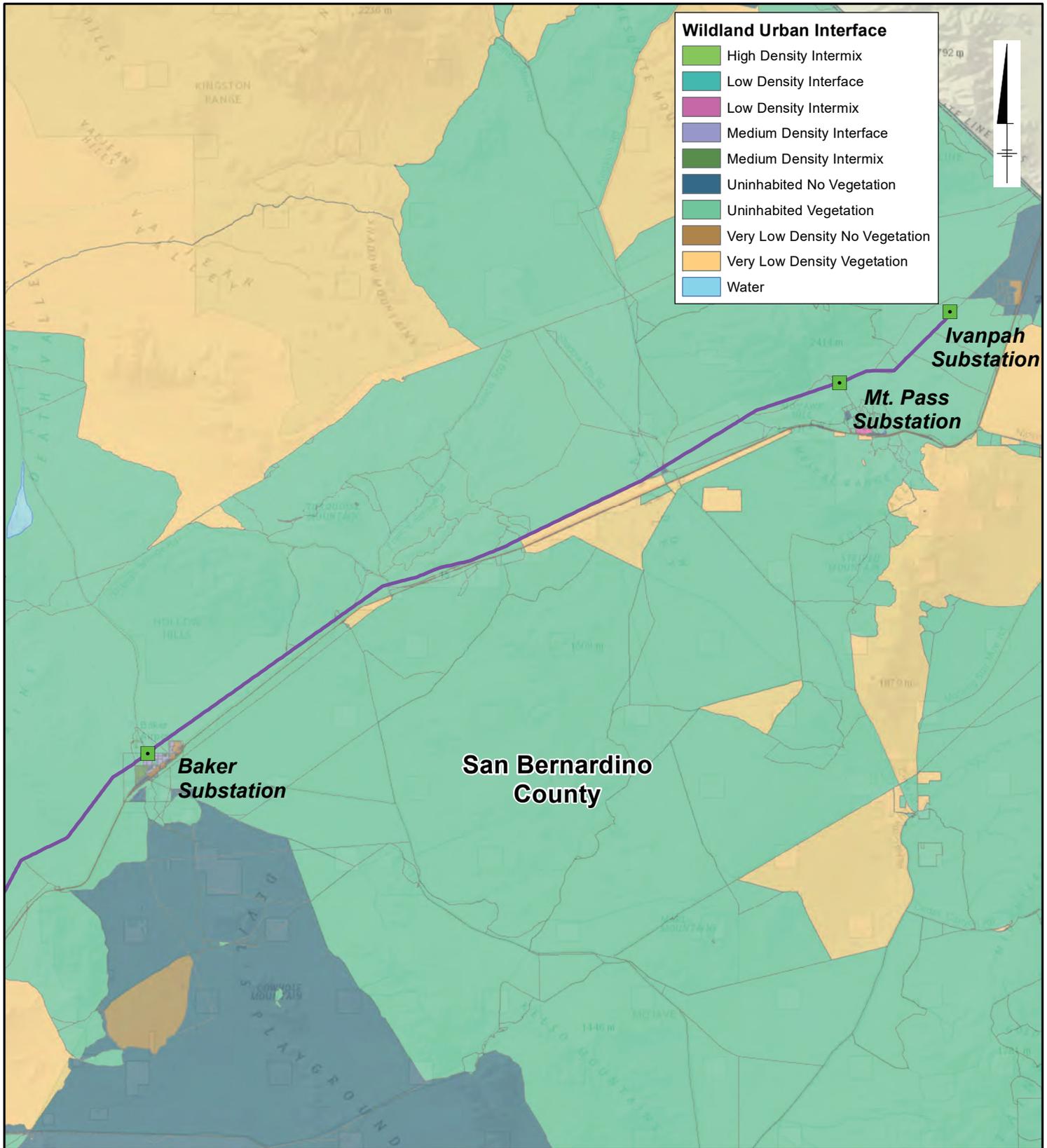
WILDLAND URBAN INTERFACE



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San Bernardino County

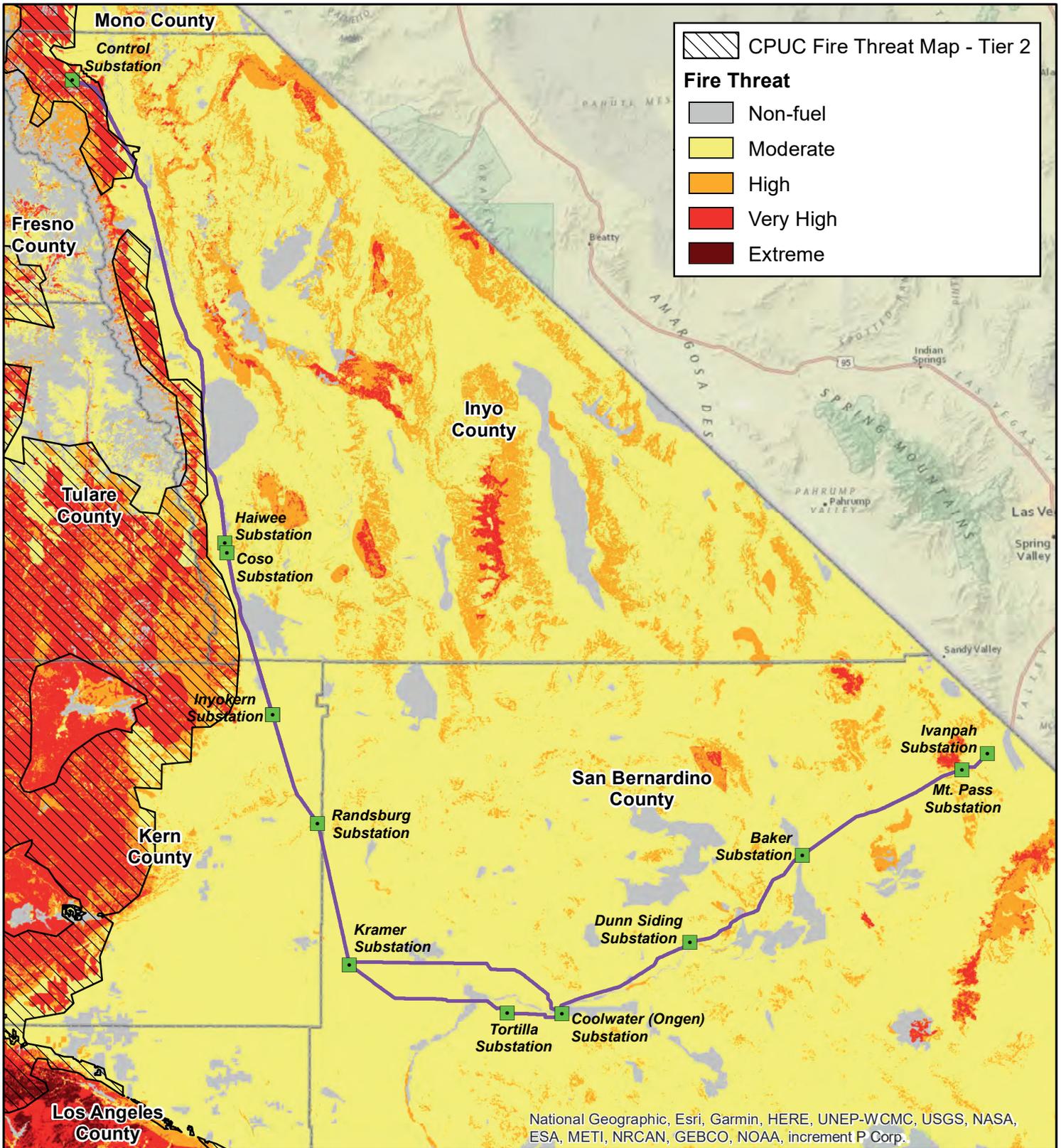
Legend

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 (1) Wildland Urban Interface source: USDA Forest Service
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WILDLAND URBAN INTERFACE	
FIGURESET: 4.9-4	



CPUC Fire Threat Map - Tier 2

Fire Threat

- Non-fuel
- Moderate
- High
- Very High
- Extreme

Legend

- Substation
- IC Project Alignment
- Counties

NOTES:
 (1) Fire Threat data source:
<https://frap.fire.ca.gov/mapping/gis-data/>



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FIRE THREAT ZONES



FIGURE
4.9-5