

## 3.9 HAZARDS AND HAZARDOUS MATERIALS

This section provides an evaluation of the potential for adoption and implementation of the proposed CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the adopted CLUO to create a significant hazard for the public or the environment, conflict with airspace or adopted emergency response plans, or expose people to wildland fires. The analysis includes a description of the existing environmental conditions, the methods used for assessment, and the potential direct and indirect impacts of project implementation. Hazards related to regional geologic and seismic hazards and the potential effects related to local hazards related to underlying geologic materials and soils are addressed in Section 3.7, “Geology and Soils.”

Comments were received in response to the NOP pertaining to pesticide use and creation of hazardous conditions as part of cannabis processing, and manufacturing processes. The Yocha Dehe Wintun Nation provided the following comments: Cannabis cultivators should not be allowed to mix, prepare, overapply, or dispose of agricultural chemicals/products (e.g., fertilizers, pesticides, and other chemicals) in any location where they could negatively affect public health or contaminate groundwater and surface water. The effectiveness of the CLUO in this regard should be evaluated.

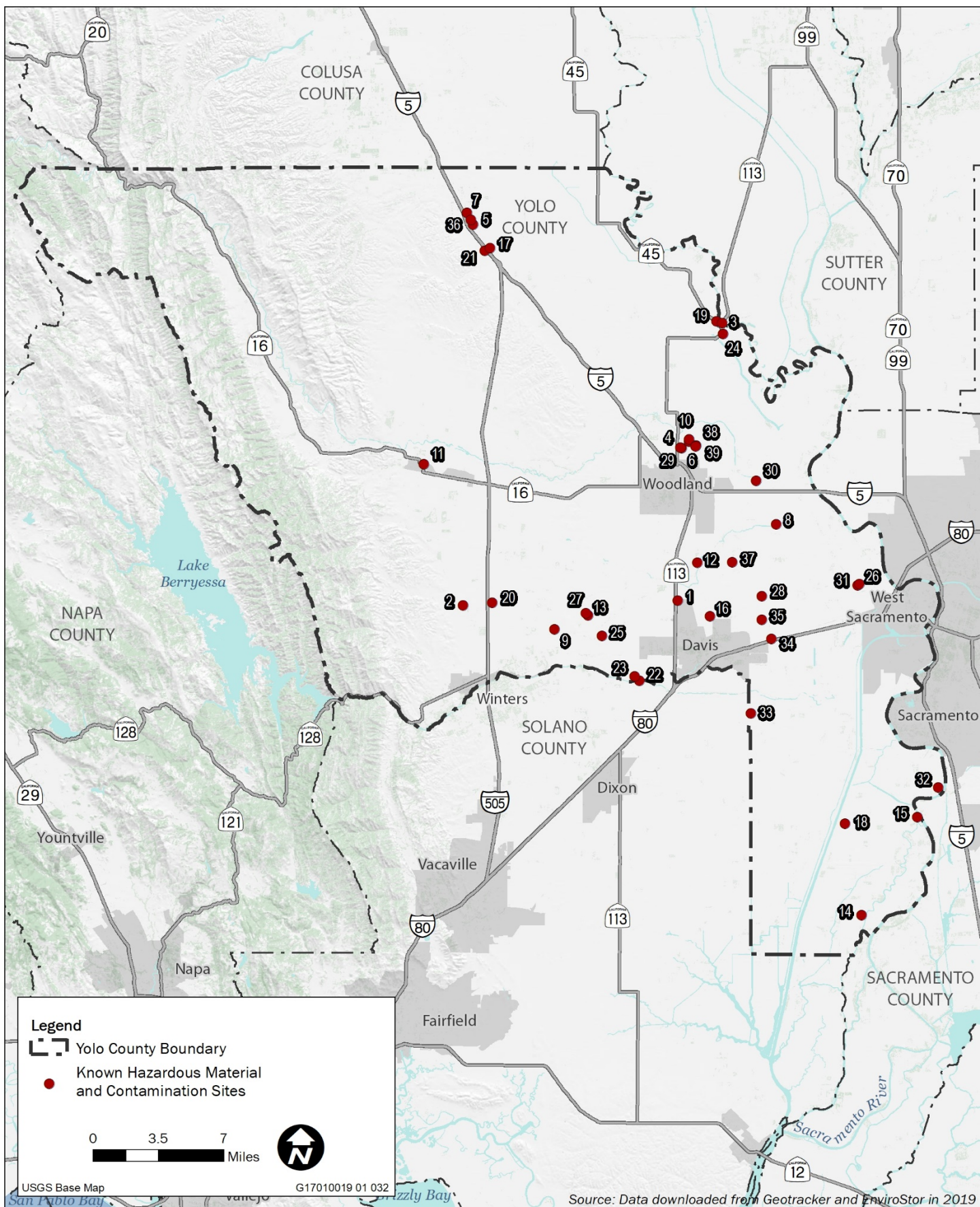
Potential public health impacts related to cannabis uses are evaluated in this section. Potential environmental impacts related to use of pesticides in the cultivation of cannabis crops are considered in Section 3.2, “Agricultural Resources.” Potential water quality impacts are considered in Section 3.10, “Hydrology and Water Quality.”

### 3.9.1 Environmental Setting

#### HAZARDOUS MATERIALS AND WASTES

Hazardous materials are routinely used, stored, and transported by businesses (including industrial and commercial/retail businesses), public and private institutions (such as educational facilities and hospitals), and households. Due to lack of awareness with regard to handling and disposal, accidents, intentional actions, and historical business practices that predate current regulatory standards, sites are located in the County where hazardous wastes were released to soil or groundwater during storage, use, transfer, and disposal. These include sites that were historically contaminated but have been remediated and sites that are known, or believed, to be contaminated that are currently being characterized or undergoing remediation. Hazardous waste releases may be localized to the originating parcel or may migrate and contaminate nearby areas.

The State of California maintains the linked EnviroStor and Geotracker databases of known contamination sites pursuant to Government Code Section 65962.5. Based on the information gathered from these databases in 2019, there are a total of 39 known hazardous material and contamination sites in the County (see Exhibit 3.9-1). Of these sites there 31 active sites (clean-up activities ongoing). These sites include six leaking underground storage tanks (USTs), nine cleanup program sites, a military base cleanup site, and 15 land disposal sites.



**Exhibit 3.9-1**

**Known Hazardous Material and Contamination Sites**

## Superfund Sites

The Frontier Fertilizer site is the only Superfund site identified in Yolo County. The site was placed on the U.S. Environmental Protection Agency's (EPA's) Superfund list on May 31, 1994. It was first developed in the 1950s to store agricultural equipment. In the 1970s, business practices were to store, mix, and distribute pesticides and fertilizers for local agriculture. Pesticide handling ceased in 1983, when it was discovered that pesticides in wastewater disposed into an unlined disposal pit were resulting in the contamination of soils and the migration of these chemicals into shallow groundwater. EPA has been operating a groundwater extraction and treatment system since 1995. Quarterly groundwater monitoring data indicate that there are still areas with residual contamination. Soil gas and groundwater sampling is ongoing. There are land use restrictions in place. The California Department of Toxic Substances Control (DTSC) currently serves as the lead agency for groundwater remedy operation and maintenance and facility maintenance.

## Underground Storage Tanks

Flammable liquids, such as gasoline, have historically been stored in USTs, which tend to leak over time, resulting in potential risks for the general public and the environment. Leaking USTs are common in Yolo County and are often associated with airports, farms, and abandoned railroad lines.

## Hazardous Waste Generation in Yolo County

Approximately 800 Yolo County businesses generated hazardous waste in 2019. Generators of hazardous waste in Yolo County are required to submit a Hazardous Materials Business Plan to Yolo County Environmental Health Division (YCEHD) and are inspected for compliance with federal and state hazardous waste storage, handling, and disposal regulations at least once every 3 years (YCEHD 2019).

## HAZARDOUS MATERIALS ASSOCIATED WITH AGRICULTURE

Agricultural enterprises have historically stored, handled, and applied pesticides and herbicides throughout Yolo County. Agricultural chemicals used before the 1970s often included highly persistent compounds, such as dichlorodiphenyltrichloroethane (DDT). Inorganic compounds containing heavy metals, such as arsenic, lead, and mercury, were commonly used before the 1950s. Chemicals commonly used in the past have the potential to leave residual inorganic or organic components in shallow soils that could persist for many decades. If present in elevated concentrations, these residues could pose a potential health risk to persons who come in direct contact with surface soils.

Modern agricultural chemicals are generally less persistent organic compounds. Routine application of these materials does not typically result in accumulation to levels sufficient to cause concern because of product testing by EPA before commercial use and regulation related to product application. Typical concerns are (1) pesticide-handling areas that lack concrete pads, berms, or cribs to contain spills or leaks during handling and storage and (2) rinse water from washout facilities for pesticide-application equipment that has not been properly collected and treated before discharge. Equipment-repair and petroleum-storage areas might also be of concern.

## NATURALLY OCCURRING ASBESTOS

Naturally occurring asbestos includes fibrous minerals found in serpentine and other certain types of rock formations. Serpentine rocks are mapped in the northwest portion of the County in the Cache Creek Wilderness, which is managed by the U.S. Bureau of Land Management (U.S. Geological Survey and California Geological Survey 2011). Natural weathering or human disturbance can break naturally occurring asbestos down into microscopic fibers that are suspended easily in air. When airborne asbestos is inhaled, these thin fibers irritate tissues and resist the body's natural defenses.

## AIRPORT HAZARDS

Yolo County has four public use airports: Yolo County Airport, Borges-Clarksburg Airport, Watts-Woodland Airport, and University Airport. The Yolo County Airport is located in south-central Yolo County, just to the north and west of the city of Davis and southwest of the city of Woodland. The Borges-Clarksburg Airport is located in eastern Yolo County, approximately 1 mile northeast of the town of Clarksburg. The Watts-Woodland Airport is located approximately 5 miles west of the city of Woodland. University Airport is located approximately 2 miles west of the city of Davis. In addition, Sacramento International Airport is located immediately east of the County boundary, and there are a number of private airstrips and heliports in the County, including the California Highway Patrol Academy Airport in Bryte (West Sacramento), G3 Ranch Airport in Capay, Medlock Field between Woodland and Davis, KOVR television station's helistop in West Sacramento, and Joe Heidrick Heliport in Woodland.

## WILDLAND FIRE HAZARDS

In July 2018, Yolo County had two wildfires: the County Fire (90,288 acres burned in Yolo and Napa Counties west of Guinda) and the Eighty Eight Fire (822 acres burned at County Road 88 and County Road 29).

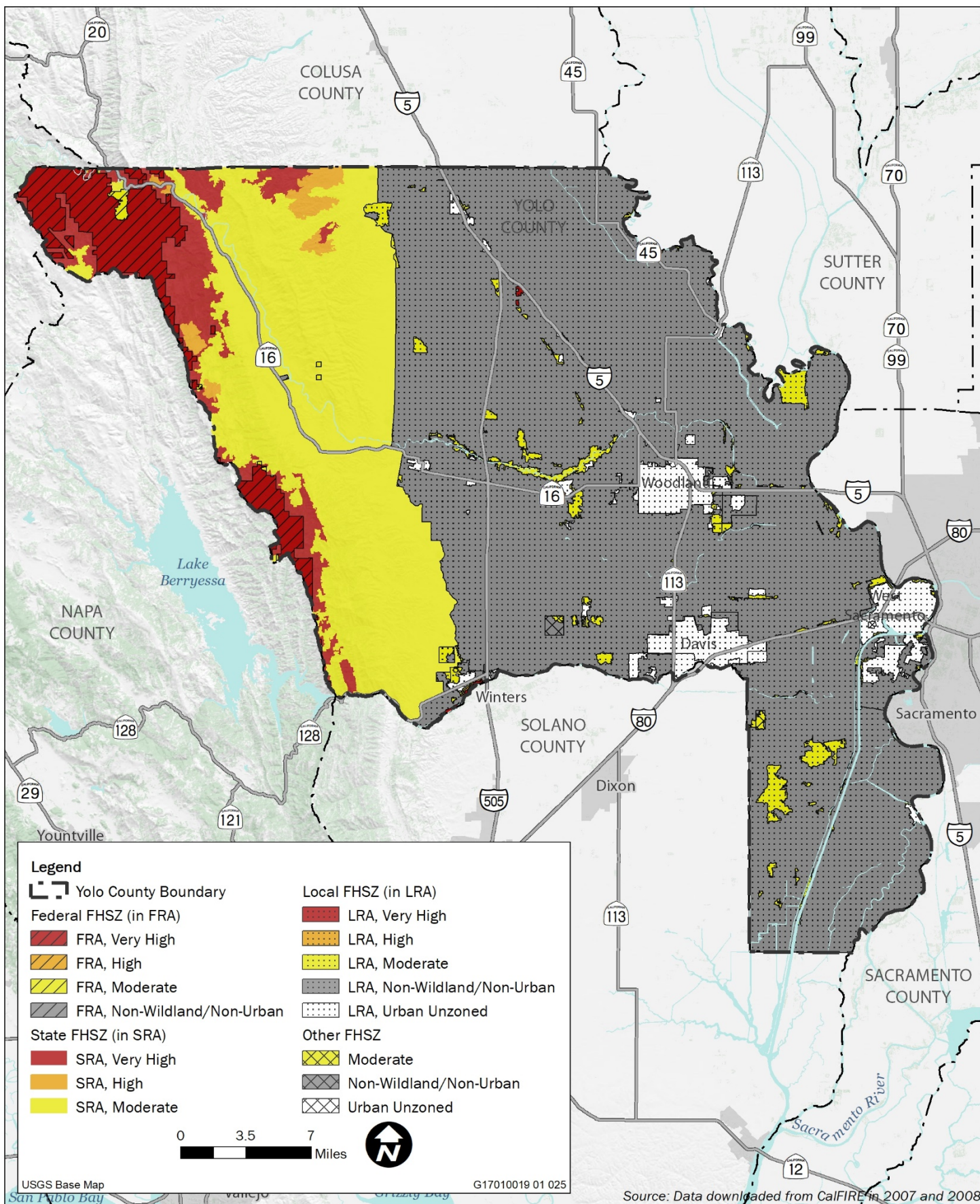
In accordance with PRC Sections 4201–4204 and Government Code Sections 51175–51189, the California Department of Forestry and Fire Protection (CAL FIRE) has mapped areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as Fire Hazard Severity Zones, represent the risks associated with wildland fires. The western third of Yolo County (west of Esparto and Winters) has been classified as having moderate to very high wildfire risk, with the very high risk areas concentrated in the northwest portion of the County bordering Napa, Lake, and Colusa Counties (Exhibit 3.9-2). Most of the remaining areas of the County are unzoned, representing minimal to moderate wildfire risk.

In California, responsibility for wildfire prevention and suppression is shared by federal, state, and local agencies. Federal agencies are responsible for federal lands in Federal Responsibility Areas. The State of California has determined that some nonfederal lands in unincorporated areas with watershed value are of statewide interest and have classified those lands as State Responsibility Areas, which are managed by CAL FIRE. All incorporated areas and other unincorporated lands are classified as Local Responsibility Areas. Most of the western third of Yolo County has been classified as a State Responsibility Area in the moderate hazard category, with Federal Responsibility Areas near the northwest and west County boundaries. Under state regulations, areas within very high fire hazard risk zones must comply with specific building and vegetation management requirements intended to reduce property damage and loss of life within these areas.

## VECTORS

The Sacramento-Yolo Mosquito Vector Control District (District) implements an integrated pest management plan throughout Sacramento and Yolo Counties that includes public education, surveillance, and control activities. The District has prepared a Mosquito Reduction Best Management Practices Manual that provides specific information regarding District policies, mosquito biology, and various best management practices (BMPs) that can be useful in reducing mosquito populations. Land use-specific sections provide guidance for landowners and land-managers who deal with programs such as: managed wetlands, stormwater and wastewater systems, irrigated agriculture, rice production, dairies, swimming pools, cemeteries, and tire storage facilities. The District's Ecological Management Department provides detailed guidance to property owners on how to best implement the BMPs.





**Exhibit 3.9-2**

**Fire Hazard Designations in the County**

## 3.9.2 Regulatory Setting

### FEDERAL

#### **Comprehensive Environmental Response, Compensation, and Liability Act**

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act) (42 U.S. Code Section 9601 et seq.) was established to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. CERCLA created a tax on the chemical and petroleum industries to generate funds to clean up abandoned or uncontrolled hazardous waste sites for which no responsible party could be identified. CERCLA also granted authority to EPA to respond directly to hazardous waste spills and required those responsible for a spill or accidental release of hazardous materials to report the release to EPA.

The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499) amended some provisions of CERCLA. The Superfund Amendments and Reauthorization Act increased the focus on human health problems posed by hazardous waste releases, stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites, and encouraged greater citizen participation in making decisions on how sites should be cleaned up.

#### **Resource Conservation and Recovery Act**

The Resource Conservation and Recovery Act (RCRA) (42 U.S. Code Section 6901 et seq.) sets national goals for protecting human health and the environment from the potential hazards of waste disposal, conserving energy and natural resources, reducing the amount of waste generated, and ensuring that wastes are managed in an environmentally sound manner. To achieve these goals, the RCRA established three interrelated programs: the solid waste program, the hazardous waste program, and the UST program.

The hazardous waste program established a system for controlling hazardous wastes from the time they are generated to the time they are disposed of (“cradle-to-grave” management). Under the RCRA, owners and operators of hazardous waste treatment, storage, and disposal facilities must follow a set of standards (e.g., facility design and operation, contingency planning and emergency preparedness, and recordkeeping) to minimize risk and impacts on human health and the environment, codified in Title 40 of the CFR, Part 264.

#### **Emergency Planning and Community Right-to-Know Act—Toxic Release Inventory**

Section 313 of the Emergency Planning and Community Right-to-Know Act established the Toxic Release Inventory (TRI). TRI is a publicly available database containing information on disposal and other releases of toxic chemicals from industrial facilities. As stipulated in 40 CFR Part 372, owners or operators of facilities that release toxic chemicals above a certain threshold (25,000 pounds or more per year) are required to submit information about (1) on-site releases and other disposals of toxic chemicals; (2) on-site recycling, treatment, and energy recovery associated with TRI chemicals; (3) off-site transfers of toxic chemicals from TRI facilities to other locations; and (4) pollution prevention activities at facilities.

#### **Hazardous Materials Transportation Act**

The U.S. Department of Transportation (DOT) has developed regulations in CFR Titles 10 and 49 pertaining to the transport of hazardous substances and hazardous wastes. The Hazardous Materials Transportation Act is administered by the Research and Special Programs Administration of DOT. The act provides DOT with a broad mandate to regulate the transport of hazardous materials, with the purpose of adequately protecting the nation against risk to life and property that is inherent in the commercial transportation of hazardous materials. DOT regulations that govern the transportation of hazardous materials are applicable to any person who transports, ships, causes to be transported or shipped, or who is involved in any way with the manufacture or testing of hazardous materials packaging or containers.

## Occupational Safety and Health Administration Worker Safety Requirements

The Occupational Safety and Health Administration (OSHA) is responsible for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for handling hazardous substances and addressing other potential industrial hazards. OSHA also establishes criteria by which each state can implement its own health and safety program. The Hazard Communication Standard (CFR Title 29, Part 1910) requires that workers be informed of the hazards associated with the materials they handle. These standards include exposure limits for a wide range of specific hazardous materials, including pesticides, as well as requirements that employers provide personal protective equipment (i.e., protective equipment for eyes, face, or extremities; protective clothing; respiratory devices) to their employees wherever it is necessary (i.e., when required by the label instructions) (29 CFR Section 1910.132). Workers must be trained in safe handling of hazardous materials, use of emergency response equipment, and building emergency response plans and procedures. Containers must be labeled appropriately, and material safety data sheets must be available in the workplace.

## STATE

### Management of Hazardous Materials

In California, both federal and state community right-to-know laws are coordinated through the Governor's Office of Emergency Services. The federal law, Superfund Amendments and Reauthorization Act Title III or the Emergency Planning and Community Right-to-Know Act (EPCRA), described above, encourages and supports emergency planning efforts at the state and local levels and to provide local governments and the public with information about potential chemical hazards in their communities. Because of the community right-to-know laws, information is collected from facilities that handle (e.g., produce, use, store) hazardous materials above certain quantities. The provisions of EPCRA apply to four major categories:

- emergency planning,
- emergency release notification,
- reporting of hazardous chemical storage, and
- inventory of toxic chemical releases.

The corresponding state law is Chapter 6.95 of the California Health and Safety Code (Hazardous Materials Release Response Plans and Inventory). Under this law, qualifying businesses are required to prepare a Hazardous Materials Business Plan, which would include hazardous materials and hazardous waste management procedures and emergency response procedures, including emergency spill cleanup supplies and equipment. At such time as the applicant begins to use hazardous materials at levels that reach applicable state and/or federal thresholds, the plan is submitted to the administering agency.

DTSC, a division of the California Environmental Protection Agency, has primary regulatory responsibility over hazardous materials in California, working in conjunction with EPA to enforce and implement hazardous materials laws and regulations. As required by Section 65962.5 of the California Government Code, DTSC maintains a hazardous waste and substances site list for the state, known as the Cortese List. Individual regional water quality control boards (RWQCBs) are the lead agencies responsible for identifying, monitoring, and cleaning up leaking USTs.

### Transport of Hazardous Materials and Hazardous Materials Emergency Response Plan

The State of California has adopted DOT regulations for the movement of hazardous materials originating within the state and passing through the state; state regulations are contained in 26 CCR. State agencies with primary responsibility for enforcing state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation. Together, these agencies determine container types used and license hazardous waste haulers to transport hazardous waste on public roads.

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous materials incidents is one part of the plan. The plan is managed by the Governor's Office of Emergency Services, which coordinates the responses of other agencies in the project area.

### **Management of Construction Activities**

Through the Porter-Cologne Water Quality Control Act and the National Pollutant Discharge Elimination System (NPDES) program, RWQCBs have the authority to require proper management of hazardous materials during project construction. For a detailed description of the Porter-Cologne Water Quality Control Act, the NPDES program, and the role of the Central Valley RWQCB, see Section 3.10, "Hydrology and Water Quality."

The State Water Resources Control Board (SWRCB) adopted the statewide NPDES General Permit in August 1999. The state requires that projects disturbing more than 1 acre of land during construction file a Notice of Intent with the RWQCB to be covered under this permit. Construction activities subject to the General Permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce nonstormwater discharges to storm sewer systems and other waters. A storm water pollution prevention plan must be developed and implemented for each site covered by the permit. It must include BMPs designed to prevent construction pollutants from contacting stormwater and keep products of erosion from moving off-site into receiving waters throughout the construction and life of the project; the BMPs must address source control and, if necessary, pollutant control.

### **Worker Safety**

The California Division of Occupational Safety and Health (referred to as Cal/OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations within the state. Cal/OSHA standards are typically more stringent than federal OSHA regulations and are presented in Title 8 of the CCR. Cal/OSHA conducts on-site evaluations and issues notices of violation to enforce necessary improvements to health and safety practices.

Title 8 of the CCR also includes regulations that provide for worker safety when blasting and explosives are utilized during construction activities. These regulations identify licensing, safety, storage, and transportation requirements related to the use of explosives in construction.

### **California Accidental Release Prevention Program**

The goal of the California Accidental Release Prevention (CalARP) Program (CCR Title 19, Division 2, Chapter 4.5) is to reduce the likelihood and severity of consequences of any releases of extremely hazardous materials. Any business that handles regulated substances (chemicals that pose a major threat to public health and safety or the environment because they are highly toxic, flammable, or explosive, including ammonia, chlorine gas, hydrogen, nitric acid, and propane) must prepare a risk management plan. The risk management plan is a detailed engineering analysis of the potential accident factors present at a business and the measures that can be implemented to reduce this accident potential. The plan must provide safety information, hazard data, operating procedures, and training and maintenance requirements. The list of regulated substances is found in Article 8, Section 2770.5 of the program regulations.

### **Hazardous Waste Control Law and Universal Waste Rule**

Under CCR Title 22 and the California Hazardous Waste Control Law, DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste. California's Universal Waste Rule allows individuals and business to transport, handle, and recycle certain common hazardous wastes, termed universal wastes, in a manner that differs from the requirements for most hazardous wastes. Universal wastes include televisions, computers, and other electronic devices, as well as batteries, fluorescent lamps, mercury thermostats, and other mercury-containing equipment. The hazardous waste regulations (CCR Title 22, Division 4.5, Chapter 11) identify seven categories of hazardous wastes that can be managed as universal wastes. Any unwanted item that falls within one of these waste streams can be handled, transported and recycled following the simple requirements set forth in the universal waste regulations.



## Cannabis Manufacturing Regulations

CCR Title 17, Public Health, Division 1 State Department of Health Services, Chapter 13, includes the following hazardous material and safety requirements regarding manufacturing processes for cannabis:

- Section 40223(b): Ethanol extraction operations shall be approved by the local fire code official and shall be operated in accordance with applicable Division of Occupational Safety and Health (Cal/OSHA) regulations and any other state and local requirements.
- Section 40225 (Closed-Loop Extraction System Requirements):
  - (a) Chemical extractions using CO<sub>2</sub>; a volatile solvent; or chlorofluorocarbon, hydrocarbon, or other fluorinated gas shall be conducted in a professional closed loop extraction system designed to recover the solvents. The system shall be commercially manufactured and bear a permanently affixed and visible serial number. The system shall be certified by a California-licensed engineer that the system was commercially manufactured, safe for use with the intended solvent, and built to codes of recognized and generally accepted good engineering practices, such as:
    - (1) The American Society of Mechanical Engineers (ASME);
    - (2) American National Standards Institute (ANSI);
    - (3) Underwriters Laboratories (UL); or
    - (4) The American Society for Testing and Materials (ASTM).
  - (b) Professional closed loop systems, other equipment used, the extraction operation, and facilities must be approved for use by the local fire code official and comply with any required fire, safety, and building code requirements related to the processing, handling, and storage of the applicable solvent or gas.
  - (c) The certification document required pursuant to subsection (a) shall contain the signature and stamp of a California-licensed professional engineer and the serial number of the extraction unit being certified.
  - (d) The licensee shall establish and implement written procedures to document that the closed loop extraction system is maintained in accordance with the equipment manufacturer specifications and to ensure routine verification that the system is operating in accordance with specifications and continues to comply with fire, safety, and building code requirements.
  - (e) A licensee shall develop standard operating procedures, good manufacturing practices, and a training plan prior to producing extracts. Any personnel using solvents or gases in a closed loop system to create extracts must be trained on how to use the system, have direct access to applicable safety data sheets, and handle and store solvents and gases safely.
  - (f) The extraction operation shall be operated in an environment with proper ventilation, controlling all sources of ignition where a flammable atmosphere is or may be present, and shall be operated in accordance with applicable Division of Occupational Safety and Health (Cal/OSHA) regulations and any other state and local requirements.
  - (g) No closed loop extraction system operation shall occur in an area zoned as residential.
- Section 40280 (Training Program):
  - (a) The licensee shall implement a training program to ensure that all personnel present at the premises are provided information and training that, at minimum, covers the following topics:
    - (1) Within 30 days of the start of employment:

- (A) Health and safety hazards;
  - (B) Hazards presented by all solvents or chemicals used at the licensed premises as described in the safety data sheet for each solvent or chemical;
  - (C) Emergency response procedures;
  - (D) Security procedures;
  - (E) Record keeping requirements; and
  - (F) Training requirements.
- (2) Manufacturing and production personnel, prior to independently engaging in any cannabis manufacturing process:
- (A) An overview of the cannabis manufacturing process and standard operating procedure(s);
  - (B) Quality control procedures;
  - (C) The product quality plans developed in accordance with Section 40253;
  - (D) Proper and safe usage of equipment or machinery;
  - (E) Safe work practices applicable to an employee's job tasks, including appropriate use of any necessary safety or sanitary equipment;
  - (F) Cleaning and maintenance requirements;
  - (G) Emergency operations, including shutdown; and
  - (H) Any additional information reasonably related to an employee's job duties.

## California Fire Code

The California Fire Code is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The California Fire Code establishes minimum requirements to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. The California Fire Code also contains requirements related to emergency planning and preparedness, fire service features, building services and systems, fire-resistance-rated construction, fire protection systems, and construction requirements for existing buildings, as well as specialized standards for specific types of facilities and materials. Structures used for indoor cultivation of cannabis and cannabis-supportive uses (e.g., manufacturing, distribution, processing, microbusinesses, and retail nurseries) would be subject to applicable sections of the California Fire Code.

### Hazardous Materials Management Plan

The California Fire Code requires businesses that handle more than a threshold quantity of hazardous materials to prepare a Hazardous Materials Management Plan (HMMP) and a Hazardous Materials Inventory Statement (HMIS). HMMPs and HMISs are similar to the Hazardous Materials Business Plans (HMBPs) and Hazardous Materials Area Plans (HMAP) required under Chapter 6.95 of the California Health and Safety Code, but the CAL FIRE Office of the State Fire Marshall is responsible for implementing the HMMP and HMIS.

The HMMP must include a facility site plan containing information such as the location of emergency equipment, hazardous material storage tanks, and emergency exits. The HMIS must include information on the hazardous materials at the site, such as product name, chemical components, amount in storage, and

hazard classification. As part of an application for a permit, owners or operators of facilities that handle hazardous materials also must submit an emergency response plan and an emergency response training plan. Commercial cannabis cultivation facilities that store or handle greater than threshold quantities of hazardous materials (e.g., pesticides, fuel) are required to prepare an HMMP and HMIS. Threshold quantities are defined by the state as 55 gallons of liquids, 500 pounds of solids, 200 cubic feet of a compressed gas (CalOES 2014).

### **Responsibility for Fire Protection and Hazardous Fire Areas**

PRC Sections 4125–4137 establish that CAL FIRE has the primary financial responsibility of preventing and suppressing fires in State Responsibility Areas. CAL FIRE also has responsibility for enforcement of Fire Safe Standards as required by PRC 4290 relating to road standards for fire equipment access; standards for signs identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; and fuel breaks and greenbelts.

### **Public Resources Code Division 4, Part 2, Chapter 1.5**

Chapter 1.5 (consisting of Sections 4210–4229) of the PRC requires the state to have primary financial responsibility for preventing and suppressing fires in State Responsibility Areas, as determined by the California Board of Forestry and Fire Protection.

Section 4213.1 of PRC Chapter 1.5 requires CAL FIRE, through the Fire Prevention Fee billing process, to inform property owners that if they sell a habitable structure or structures, a division of the Fire Prevention Fee may be negotiated as one of the terms of sale. Section 4213.2 of PRC Chapter 1.5 allows the owner of a property with one or more habitable structures subject to the fee, if selling the property, to negotiate a division of the fee as one of the terms of the sale. However, payment of the total fee liability remains the responsibility of the person who owns the habitable structure on July 1 of the year the fee is due.

### **Public Resources Code Section 4291**

PRC Section 4291 requires a person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material to maintain defensible space of 100 feet from each side and from the front and rear of the structure. The amount of fuel modification necessary shall take into account the flammability of the structure as affected by building material, building standards, location, and type of vegetation. Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure.

### **California Building Code**

CCR Title 24, Part 2, Section 701A.3.2 (New Buildings Located in Any Fire Hazard Severity Zone) requires that new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, any local agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted shall comply with all the requirements of Chapter 7A, including the following requirements:

- roofing design must be fire resistant and constructed to prevent the intrusion of flames and embers (Section 704A.1),
- attic ventilation must be designed to be resistant to the intrusion of flames and embers into the attic area of the structure (Section 704A.2),
- exterior walls (including vents, windows, and doors) must be designed with noncombustible or ignition-resistant material and resist the intrusion of flame and ember (Section 704A.3),
- decking must be designed with ignition-resistant material (Section 704A.4), and
- ancillary buildings and structures must comply with the above provisions (Section 704A.5).

## LOCAL

### Certified Unified Program Agency

The California Environmental Protection Agency designates specific local agencies as Certified Unified Program Agencies (CUPAs). YCEHD is the CUPA designated for Yolo County and the Cities of Davis, West Sacramento, Winters, and Woodland and is responsible for the implementation of six statewide programs within its jurisdiction:

- underground storage of hazardous substances,
- hazardous materials business plan requirements,
- hazardous waste generator requirements,
- CalARP program,
- Uniform Fire Code HMMP, and
- aboveground storage tanks (Spill Prevention Control and Countermeasures Plan only).

Implementation of these programs involves:

- permitting and inspection of regulated facilities,
- providing educational guidance and notice of changing requirements stipulated in state or federal laws and regulations,
- investigations of complaints regarding spills or unauthorized releases, and
- administrative enforcement actions levied against facilities that have violated applicable laws and regulations.

The hazardous materials programs administered under the CUPA program are described below.

#### **Hazardous Materials Management Plan**

Businesses that store hazardous materials in excess of specified quantities must report their chemical inventories to YCEHD by preparing an HMMP, also known as a business plan. This information informs the community on chemical use, storage, handling, and disposal practices. It is also intended to provide essential information to firefighters, health officials, planners, elected officials, workers, and their representatives so that they can plan for, and respond to, potential exposures to hazardous materials.

#### **California Accidental Release Prevention Program**

Under the CalARP Program, businesses that use large quantities of acutely hazardous materials must prepare a detailed engineering analysis of the potential accident factors present at a business and the mitigation measures that can be implemented to reduce this accident potential.

#### **Underground Storage Tank Programs**

Current regulations require that USTs be installed, monitored, operated, and maintained in a manner that protects public health and the environment. Tanks must be constructed with primary and secondary levels of containment and be designed to protect public health and the environment for the lifetime of the installation. The USTs must be monitored for leaks and built such that a leak from the primary container into the secondary container will be detected. When a UST tank is proposed to be removed, a detailed permit application must be submitted to YCEHD, which oversees removal activities to identify evidence of leakage.

YCEHD regulates the construction, operation, repair and removal of UST systems throughout Yolo County to ensure that hazardous materials are not released into the environment. Tanks and associated piping systems are required to meet stringent construction standards designed to reduce the potential for product loss. All tanks installed or upgraded must be continuously monitored.



### **Aboveground Storage Tank Programs**

Inspections are required for facilities storing hazardous materials in aboveground storage tanks by YCEHD. In addition, any facility operating aboveground storage tanks with an aggregate tank capacity of 1,320 gallons or more must (1) complete a Spill Prevention Control and Countermeasure plan to provide a detailed engineering analysis of the potential for release from aboveground storage tanks present at a facility and the measures, such as secondary containment and emergency response that can be implemented to reduce the release potential and (2) file a storage statement, as required by SWRCB.

### **Hazardous Waste Generation and Disposal**

Once a hazardous material has been used or processed, what remains may be considered a hazardous waste. Many items routinely used by residents and businesses, such as paints and thinners, cleaning products, and motor oil, are considered hazardous waste once they are ready for disposal. Nearly all businesses and residences in the County are expected to generate some amount of hazardous wastes (including household hazardous wastes). Hazardous waste generation and disposal regulations are administered and enforced by YCEHD. Businesses that generate more than 100 kilograms of hazardous waste per month, or more than 1 kilogram of acutely hazardous waste, must be registered with EPA's RCRA program and are subject to extensive regulations regarding storage and disposal.

### **Emergency Response**

Natural disasters, events resulting in the release of hazardous materials into the environment, and accidents resulting from a hazard necessitate an emergency response or evacuation plan. These plans facilitate coordination between government agencies to provide central management for effective response in an emergency situation within a given area. Various levels of government are responsible for applying resources and emergency relief to those in the emergency area to minimize the effects of the hazards or hazardous materials. Emergency plans outline the critical factors necessary during an emergency, including communications, transportation, a command station, control, and shelter. Emergency plans also often identify designated evacuation routes and procedures.

Yolo County maintains an Emergency Operation Center, which is the central location used to manage a disaster or other large-scale emergency in the County. Emergency response is governed by two plans: the Yolo County Emergency Operations Plan, which describes overall responsibilities, and the Yolo Operational Area Multi-Hazard Mitigation Plan, which was developed in response to a Federal Emergency Management Agency mandate to describe specific disasters and possible responses. A third plan, Yolo Operational Area Hazardous Materials Environmental Response Plan, is implemented by YCEHD and addresses response to hazardous materials emergencies. This plan establishes a Hazardous Materials Response Team, which becomes active when deemed necessary by a fire department officer and combines the forces of the University of California, Davis, City of Davis, City of West Sacramento, and City of Woodland fire departments and YCEHD.

### **Yolo County Emergency Evacuation Procedures**

Jurisdictions throughout Yolo County have participated in a joint planning project to identify evacuation zones that can be used during large-scale evacuation and shelter-in-place events. Evacuation zones are identified at the "Know Your Zone" web mapping application at [evacuate.yolocounty.org](http://evacuate.yolocounty.org). Evacuation routes generally follow major highways and roads, and rally points are identified in each zone.

### **2030 Yolo County Countywide General Plan**

The Yolo County 2030 Countywide General Plan (General Plan) establishes a goal, policies, and, as part of the implementation program, actions to ensure safety from hazardous materials and fire hazards in and around the County. Potentially relevant policies are as follows:

- **Policy HS-3.1:** Manage the development review process to protect people, structures, and personal property from unreasonable risk from wildland fires.
- **Policy HS-3.3:** Clearly communicate the risks, requirements, and options available to those who own land and live in wildfire hazard areas.

- **Action HS-A38:** Require new and/or existing development to establish “defensible space” by providing for clearance around structures, using fire resistant ground cover, building with fire-resistant roofing materials, fuel load reduction, and taking other appropriate measures.
- **Action HS-A39:** Require the design and construction of new roadways and driveways in fire hazard areas to be of sufficient width, radius and grade to facilitate access by fire-fighting apparatus.
- **Action HS-A44:** Implement State recommendations for fire prevention in Fire Hazard Severity Zones.
- **Action HS-A45:** Coordinate with fire districts to ensure fire safe design and construction of new development.
- **Policy HS-4.1:** Minimize exposure to the harmful effects of hazardous materials and waste. Protect the community and the environment from hazardous materials and waste.
- **Policy HS-4.2:** Inspect businesses regularly for compliance with their Hazardous Materials Inventory and Hazardous Materials Business Emergency Response Plan.
- **Policy HS-4.3:** Encourage the reduction of solid and hazardous wastes generated in the county.
  - **Action HS-A46:** Provide adequate separation between areas where hazardous materials are present and sensitive uses. The following land uses are considered sensitive receptors for the purpose of exposure to hazardous materials: residentially designated land uses; hospitals, nursing/convalescent homes, and similar board and care facilities; hotels and lodging; schools and day care centers; and neighborhood parks. Home occupation uses are excluded.
  - **Action HS-A47:** New development and redevelopment in areas previously used for agricultural, commercial, or industrial uses shall ensure that soils, groundwater, and buildings affected by hazardous material releases from prior land uses, as well as lead paint and/or asbestos potentially present in building materials, will not have the potential to affect the environment or health and safety of future property owners or users, and any affected areas shall be properly abated. A Phase I Environmental Site Assessment (ESA) to American Society for Testing and Materials (ASTM) standards shall be required where appropriate and a Phase II ESA may be required in certain circumstances based on the recommendations/results of the Phase I. Where the Phase I report has identified agricultural cultivation prior to the 1980s, a shallow soil investigation shall be performed at the property in accordance with DTSC guidance for sampling agricultural properties.
- **Policy HS-5.1:** Ensure that land uses within the vicinity of airports are compatible with airport restrictions and operations.
- **Policy HS-5.2:** Ensure that new development near commercial and public use airports is consistent with setbacks, height, and land use restrictions as determined by the Federal Aviation Administration and the Sacramento Area Council of Governments Airport Land Use Commission. Ensure that development proximate to private airstrips addresses compatibility issues.
- **Policy HS-5.3:** Respect and conservatively enforce airport safety zones as identified in airports CLUPs.
- **Policy PF-5.3:** Require assertive fire protection measures in all development to supplement limited rural fire district resources.
- **Policy PF-5.8:** Anticipate and adapt to potential changes in frequency and severity of wildfires resulting from predicted effects of global warming.

- **Policy PF-5.9:** The County shall require, and applicants must provide, a will-serve letter from the appropriate fire district/department confirming the ability to provide fire protection services to the project, prior to each phase.
  - **Action PF-A29:** Require that new development comply with all State and local requirements within the State Responsibility Area.
  - **Action PF-A30:** Maintain requirements that fire sprinklers be installed in all new residences and commercial/industrial areas where appropriate.

## Airport Plans

The Sacramento Area Council of Governments is the designated Airport Land Use Commission (ALUC) for Yolo, Sacramento, Sutter, and Yuba Counties. There are four general aviation airports in Yolo County. Three of these airports—Yolo County Airport, Watts-Woodland Airport, and Borges-Clarksburg Airport—are subject to the respective airport Comprehensive Land Use Plans (CLUPs) prepared by the ALUC. A fourth airport, University Airport, is subject to an Airport Layout Plan prepared by the University of California, Davis. Land use compliance and safety are addressed through implementation of the CLUPs and Yolo County Code Section 8-2.903(f) (Airport Overlay Zones) and the development requirements in Section 8-2.906(f) and the CLUPs that address density, building heights, and hazards associated with electrical interference and bird strikes.

## 3.9.3 Environmental Impacts and Mitigation Measures

### METHODS AND ASSUMPTIONS

The impact analysis below evaluates to what extent adoption and implementation of the CLUO, including issuance of subsequent Cannabis Use Permits pursuant to the CLUO, may result in significant impacts as a result of exposure of people or structures to hazardous conditions and hazardous materials or the creation of hazardous conditions. This program-level analysis is based on current information available in databases of DTSC (EnviroStor) and SWRCB (GeoTracker), as well as other sources cited in Section 3.9.1, “Environmental Setting.”

The design details of site-specific cannabis projects permitted under the CLUO are not known at this time. This analysis uses the extent and general locations of future cannabis uses assumed for each of the five alternatives based on information presented in Table 2-4, Appendix D, and Exhibits 2-4 through 2-8, provided in Chapter 2, “Description of Preferred Alternative and Equal Weight Alternatives,” to provide an assessment and comparison of reasonably foreseeable outcomes from different regulatory scenarios.

Impacts related to hazardous materials and wildfire were analyzed qualitatively based on a review of the cannabis cultivation and processing practices and associated equipment and materials that may be used as a result of implementation of the CLUO under each alternative. The analysis focused on the potential of cannabis uses to create hazards to humans through the transport, use, exposure, or accidental release of hazardous materials and increased risk of exposure to other hazards, such as wildfires. The potential for the adoption and implementation of the CLUO to result in hazardous conditions was analyzed for each alternative in the context of existing laws and regulations and the extent to which these existing regulations and proposed CLUO provisions (see Appendix C) adequately address and minimize the potential hazard impacts. Traffic safety concerns are addressed in Section 3.14, “Transportation and Circulation.”

Chapter 4, “Cumulative Impacts and Overconcentration,” contains a separate detailed analysis of the potential for cumulative effects not otherwise identified in this section, and effects from concentrations or clusters of multiple cannabis uses located in distinct subregions of the County.

## THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. These thresholds address hazards that occur in the County and are considered important by the state, CEQA, and Yolo County and whether implementation of the CLUO could create an impact.

The project would result in a significant impact related to hazards 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/or 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 one-quarter mile of an existing or proposed school;
- be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- 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, would the project result in a safety hazard or excessive noise for people residing or working in the project area;
- impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildfires; or
- for project features located in or near State Responsibility Areas or lands classified as very high fire hazard services zones:
  - 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;
  - require the installation 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 on the environment; or
  - expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, postfire slope instability, or drainage changes.

These thresholds also address the Mandatory Findings of Significance under State CEQA Guidelines Section 15065(a)(4) on whether the environmental effects of the project would cause adverse effect on human beings, either directly or indirectly.



## IMPACT ANALYSIS

### Impact HAZ-1: Create a Significant Hazard through Transport, Use, or Disposal of Hazardous Materials

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Adoption and implementation of the proposed CLUO, including subsequent Cannabis Use Permits pursuant to the adopted CLUO, could create a hazard through the routine transport, use, or disposal of pesticides and other hazardous materials. However, compliance with existing regulations specifically designed to protect the public health would be sufficient to preclude significant hazardous materials impacts on public health and the environment. This impact would be **less than significant** for all alternatives.

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Similar to many agricultural operations, commercial cannabis operations do involve the use of pesticides, herbicides, rodenticides, and other chemicals for growing, processing, and manufacturing of cannabis and cannabis products. Cannabis uses are regulated to protect public health and through storage, use, and safety requirements.

Operation of all cannabis cultivation sites, regardless of alternative, would be required to comply with Section 8-2.1408(A) of the CLUO, which states:

Permittees shall comply with applicable County and State requirements, and manufacturer instructions, for use to the satisfaction of the County Agricultural Commissioner and other responsible official. California Department of Food and Agriculture (CDFA) licensees shall implement the Pest Management Plan required pursuant to Section 8106(a)(3) and Section 8106(b)(2) of the CDFA Regulations, as applicable. CDFA licensees shall comply with pesticide laws and regulations as enforced by the Department of Pesticide Regulation pursuant to Section 8307, Pesticide Use Requirements, of the CDFA Regulations.

As described in Section 3.2, “Agricultural Resources,” pesticides used on cannabis cultivation sites must have active ingredients that are exempt from residue tolerance requirements and that are either exempt from registration requirements or are registered for a use that is broad enough to include use on cannabis. Some of these pesticides are bacterial-based insect pathogens (e.g., *Bacillus thuringiensis*) or biofungicides (e.g., *Bacillus subtilis*, *Gliocladium virens*). Active ingredients exempt from registration requirements are mostly food-grade essential oils, such as peppermint oil or rosemary oil. The use of restricted pesticides on cannabis cultivation is prohibited. Harvested cannabis is required to pass laboratory tests for the following constituents as required under CCR Title 16, Division 42, Sections 5304 and 5702. Cannabis must be sampled for the following constituents and pass the testing levels set forth in CCR Sections 5718–5725, which are based on protection of public health and the environment:

- cannabinoids;
- foreign material;
- heavy metals;
- microbial impurities;
- mycotoxins;
- moisture content and water activity;
- residual pesticides;
- residual solvents and processing chemicals;
- if applicable, terpenoids; and
- if applicable, homogeneity.

If the tested cannabis batch fails these tests, the cannabis batch will not be released for retail sale. As a result of these testing requirements, licensed cannabis cultivation sites limit the use of pesticides that could create conflicts with adjoining land uses and agricultural activities. CCR Section 8307(b) includes pesticide storage requirements (leak containment) and restrictions on application methods to prevent off-site drift to avoid public health impacts and off-site contamination, as well as protect water quality.

CCR Title 17, Division 1, Chapter 13 Sections 40223(b), 40225(a)(b)(d)(e), and 40280(a), identified below, require implementation of safety measures for cannabis manufacturing operations that ensure protection of public health and safety:

- Section 40223(b): Ethanol extraction operations shall be approved by the local fire code official and shall be operated in accordance with applicable Division of Occupational Safety and Health (Cal/OSHA) regulations and any other state and local requirements.
- Section 40225(a): Chemical extractions using CO<sub>2</sub>; a volatile solvent; or chlorofluorocarbon, hydrocarbon, or other fluorinated gas shall be conducted in a professional closed loop extraction system designed to recover the solvents.
- Section 40225(b): Professional closed loop systems, other equipment used, the extraction operation, and facilities must be approved for use by the local fire code official and comply with any required fire, safety, and building code requirements related to the processing, handling, and storage of the applicable solvent or gas.
- Section 40225(d): The licensee shall establish and implement written procedures to document that the closed loop extraction system is maintained in accordance with the equipment manufacturer specifications and to ensure routine verification that the system is operating in accordance with specifications and continues to comply with fire, safety, and building code requirements.
- Section 40225(e): A licensee shall develop standard operating procedures, good manufacturing practices, and a training plan prior to producing extracts. Any personnel using solvents or gases in a closed loop system to create extracts must be trained on how to use the system, have direct access to applicable safety data sheets, and handle and store solvents and gases safely.
- Section 40280(a): The licensee shall implement a training program to ensure that all personnel present at the premises are provided information and training that covers health and safety hazards and emergency response procedures.

In addition to state requirements and CLUO Section 8-2.1408(A) that addresses pesticide use, CLUO Section 8-2.1408(W) requires that:

If the facility handles any hazardous materials in reportable quantities the facility shall be regulated by the Certified Unified Program Agency (CUPA) in compliance with state law Section 25500 of the CHSC [California Health and Safety Code]. Storage and disposal of hazardous materials and hazardous waste must be conducted in a manner consistent with Federal, State, and County laws, regulations, rules, and/or other requirements. Required disclosures, business plans, storage protocol including fuel storage, and hazard response plans shall be provided to the County and shall be consistent with the requirements of the Division of Environmental Health and California Code of regulations Title 22 Division 4.5. CDFA licensees shall demonstrate compliance with the principles and guidelines for discharge and water quality contained in the Cannabis Cultivation Policy of the State Water Resources Control Board.

Section 3.9.2, "Regulatory Setting," identifies the hazardous programs administered under the CUPA. These programs protect public health and the environment from hazardous material usage through storage requirements and measures to contain accidental releases, proper handling and disposal requirements, and disclosure of operations involving hazardous materials to the County and fire protection agencies to ensure proper response if accidents occur (e.g., spills and fires). The CLUO would be consistent with General Plan Policy HS-4.2 regarding compliance with hazardous material requirements.

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to

indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. Given that personal outdoor cultivation would be an ancillary use to the residential parcel and would not involve large-scale use of pesticides or hazardous materials, no hazardous material impacts are expected.

**Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)**

Alternative 1 is assumed to retain the 78 existing and eligible cultivation sites and would retain the existing cannabis cultivation that currently exists in the County (see Exhibit 2-4). Nine of the 78 existing and eligible cannabis cultivation sites are assumed to relocate under this alternative to comply with zoning standards under the CLUO. No expansion of cannabis uses would occur.

These cultivation sites may use pesticides or other hazardous materials that would be regulated under state requirements and Section 8-2.1408(A) and Section 8-2.1408(W) of the CLUO, described above. These requirements restrict the type and extent of pesticides that can be used and include storage and handling requirements designed to protect human health and the environment (e.g., no use of restricted pesticides and storage requirements that include leak containment). Implementation of these regulations, along with compliance with manufacturers' instructions, would avoid significant impacts related to the use and handling of hazardous materials.

This impact would be **less than significant** under Alternative 1.

**Alternative 2: All License Types with Moderate Limits**

Alternative 2 assumes the relocation of 30 of the 78 existing and eligible cultivation sites to comply with zoning and buffering standards of the CLUO, and the provision of 54 new cannabis uses (cultivation, manufacturing, distribution, testing, microbusinesses, retail, processing, and nurseries) (see Table 2-4 and Exhibit 2-5).

This alternative assumes up to 20 manufacturing sites. Seven of these sites are assumed for analysis purposes, to be located near the communities of Guinda, Esparto, and Dunnigan and the City of Winters. The creation of cannabis products is often accomplished through extraction methods and/or chemical synthesis. Extraction usually involves the use of a closed loop system using carbon dioxide or volatiles (e.g., butane) to remove the key constituents from the cannabis. While these systems can present health and safety hazards if not conducted properly, CCR Title 17, Division 1, Chapter 13 Sections 40223(b), 40225(a)(b)(d)(e), and 40280(a), identified above, require implementation of safety measures for cannabis manufacturing operations that ensure protection of public health and safety.

Cannabis uses and the associated use of pesticides and other hazardous materials would be regulated under the state requirements noted above, and Section 8-2.1408(A) and Section 8-2.1408(W) of the CLUO include standards to protect public health and the environment that would limit the extent and type of pesticides used, as well as standards related to the handling and storage of hazardous materials and training requirements related to them. Implementation of these regulations, along with compliance with manufacturers' instructions, would avoid significant impacts related to the use and handling of hazardous materials.

This impact would be **less than significant** under Alternative 2.

**Alternative 3: All License Types with High Limits**

Alternative 3 assumes the relocation of nine of the 78 existing and eligible cultivation sites to comply with zoning standards of the CLUO, and the provision of 186 new cannabis uses (cultivation, manufacturing, distribution, testing, microbusinesses, retail, processing, and nurseries) (see Table 2-4 and Exhibit 2-6).

Alternative 3 includes up to 40 manufacturing sites. Eleven of these sites are assumed for analysis purposes, to be located near the communities of Guinda, Esparto, Madison, Yolo, Dunnigan, and the cities of Winters and Woodland. This alternative would use the same extraction or chemical synthesis processes as described under Alternative 2. While these systems can present health and safety hazards if not conducted

properly, CCR Title 17, Division 1, Chapter 13 Sections 40223(b), 40225(a)(b)(d)(e), and 40280(a), identified above, require implementation of safety measures for cannabis manufacturing operations that ensure protection of public health and safety.

Cannabis uses and the associated use of pesticides and other hazardous materials would be regulated under the state requirements noted above, and Section 8-2.1408(A) and Section 8-2.1408(W) of the CLUO include standards to protect public health and the environment that would limit the extent and type of pesticides used, as well as standards related to the handling and storage of hazardous materials and training requirements related to them. Implementation of these regulations, along with compliance with manufacturers' instructions, would avoid significant impacts related to the use and handling of hazardous materials.

This impact would be **less than significant** under Alternative 3.

**Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types**

Alternative 4 assumes the relocation of nine of the 78 existing and eligible cultivation sites to comply with zoning standards of the CLUO, and the provision of 54 new cannabis uses (cultivation, manufacturing, distribution, testing, microbusinesses, retail, processing, and nurseries) (see Table 2-4 and Exhibit 2-7).

Alternative 4 includes up to 20 manufacturing sites. Eight of these sites are assumed for analysis purposes, to be located near the communities of Guinda, Esparto, and Dunnigan and the City of Winters. This alternative would use the same extraction or chemical synthesis processes as described under Alternative 2. While these systems can present health and safety hazards if not conducted properly, CCR Title 17, Division 1, Chapter 13 Sections 40223(b), 40225(a)(b)(d)(e), and 40280(a), identified above, require implementation of safety measures for cannabis manufacturing operations that ensure protection of public health and safety.

Cannabis uses and the associated use of pesticides and other hazardous materials would be regulated under the state requirements noted above, and Section 8-2.1408(A) and Section 8-2.1408(W) of the CLUO include standards to protect public health and the environment that would limit the extent and type of pesticides used, as well as standards related to the handling and storage of hazardous materials and training requirements related to them. Implementation of these regulations, along with compliance with manufacturers' instructions, would avoid significant impacts related to the use and handling of hazardous materials.

This impact would be **less than significant** under Alternative 4.

**Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail**

Alternative 5 assumes the relocation of 30 of the 78 existing and eligible cultivation sites to comply with zoning and buffering standards of the CLUO, and the provision of 52 new cannabis uses (cultivation, manufacturing, distribution, testing, microbusinesses, processing, and nurseries) (see Table 2-4 and Exhibit 2-8).

Alternative 5 includes up to 20 manufacturing sites. Seven of these sites are assumed for analysis purposes, to be located near the communities of Guinda, Esparto, and Dunnigan and the City of Winters. This alternative would use the same extraction or chemical synthesis processes as described under Alternative 2. While these systems can present health and safety hazards if not conducted properly, CCR Title 17, Division 1, Chapter 13 Sections 40223(b), 40225(a)(b)(d)(e), and 40280(a), identified above, require implementation of safety measures for cannabis manufacturing operations that ensure protection of public health and safety.

Cannabis uses and the associated use of pesticides and other hazardous materials would be regulated under the state requirements noted above, and Section 8-2.1408(A) and Section 8-2.1408(W) of the CLUO include standards to protect public health and the environment that would limit the extent and type of pesticides used, as well as standards related to the handling and storage of hazardous materials and training requirements related to them. Implementation of these regulations, along with compliance with manufacturers' instructions, would avoid significant impacts related to the use and handling of hazardous materials.

This impact would be **less than significant** under Alternative 5.

## Mitigation Measures

No mitigation is required for any of the alternatives.

### **Impact HAZ-2: Create a Significant Hazard to the Public or Environment through Reasonably Foreseeable Upset and/or Accident Conditions Involving Release of Hazardous Materials or Be Located on a Site Included on a List of Hazardous Material Sites Complied Pursuant to Government Code Section 65962.5, Which Would Create a Significant Hazard to the Public or Environment**

Construction and operational activities associated with adoption and implementation of the proposed CLUO, including subsequent Cannabis Use Permits pursuant to the adopted CLUO, could encounter contamination remaining from past practices. Implementation of CLUO Sections 8-2.1408(CC) and 8-2.1408(OO) would require cannabis uses to mitigate any conditions that present a public safety issue, while Section 8-2.1410(C)(3) would require the provision of a Phase I Environmental Site Assessment if potential contamination issues are identified. This impact would be **less than significant** for all alternatives.

As described in Section 3.9.1, “Environmental Setting,” there are known sites in the County identified on lists of hazardous material sites under Government Code Section 65962.5; an additional unknown number of contamination sites also are likely present (see Exhibit 3.9-1). Construction activities that disturb subsurface materials could encounter contamination from past practices, placement of undocumented fill, or even authorized disposal of hazardous wastes from prior uses. Encountering these materials could expose workers, the public, or the environment to adverse effects depending on the volume, materials involved, and concentrations. As discussed under Impact HAZ-1, operational activities could also result in the accidental release of hazardous materials.

The CLUO includes the following requirements, which address public safety issues that could occur from encountering contamination:

- Section 8-2.1408(CC) Nuisance: Cannabis uses shall not create a public nuisance or adversely affect the health or safety of nearby residents or businesses by, among other things, creating dust, light, glare, heat, noise, noxious gases, odor, smoke, traffic, vibration, unsafe conditions, or other impacts, in excess of allowable thresholds, or be hazardous due to the use or storage of materials, processes, products, runoff, unauthorized releases or illegal disposal of wastes.
- Section 8-2.1408(OO) Site Design: Site design shall comply with all applicable codes, standards, regulations, and guidelines, and shall demonstrate consideration of odor control, air quality, noise control, workflow, safety and security, lighting, aesthetics, protection of resources (biological, cultural, trees, etc.) and other appropriate impact mitigation.

In addition to the above requirements, CLUO Section 8-2.14010(C)(3) would require permittees of sites suspected of potential contamination (e.g., previously used for agricultural processing, commercial, and industrial uses) to prepare a Phase I Environmental Site Assessment that would include recommendations for addressing identified contamination. Remediation of contaminated sites may include removal of contaminated soil and building materials, capping of contamination source, or other similar measures. These CLUO provisions are consistent with General Plan Policy HS-4.1 and Action HS-A47 regarding protection from hazardous materials and waste.

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. Given that personal outdoor cultivation would be an ancillary use to the residential parcel, no hazardous material or contamination impacts are expected.

**Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)**

Exhibit 3.9-3 identifies known hazardous material and contamination sites in relation to existing and eligible cultivation sites under Alternative 1. Nine of the 78 existing and eligible cannabis cultivation sites are assumed to relocate under this alternative. These nine sites could occur on or near a known contaminated site or be relocated to sites where previously unknown contamination is discovered through site construction. As noted above, implementation of CLUO Sections 8-2.1408(CC), 8-2.1408(OO), and 8-2.1410(C)(3) would require further evaluation of potential contamination issues and require remediation of any contamination that presents a public safety issue.

This impact would be **less than significant** under Alternative 1.

**Alternative 2: All License Types with Moderate Limits**

Exhibit 3.9-4 identifies known hazardous material and contamination sites in relation to assumed cannabis uses under Alternative 2. As shown in Exhibit 3.9-4, this alternative could locate eight new cannabis uses near known contamination sites. Other new cannabis sites and relocated cultivation sites (assumed to be 30 under this alternative) may also be located on sites where previously unknown contamination is discovered through site construction. As noted above, implementation of CLUO Sections 8-2.1408(CC), 8-2.1408(OO), and 8-2.1410(C)(3) would require further evaluation of potential contamination issues and require remediation of any contamination that presents a public safety issue.

This impact would be **less than significant** under Alternative 2.

**Alternative 3: All License Types with High Limits**

Exhibit 3.9-5 identifies known hazardous material and contamination sites in relation to assumed cannabis uses under Alternative 3. As shown in Exhibit 3.9-5, this alternative could locate 14 new cannabis uses near known contamination sites. Other new cannabis sites and relocated cultivation sites (assumed to be nine under this alternative) may also be located on sites where previously unknown contamination is discovered through site construction. As noted above, implementation of CLUO Sections 8-2.1408(CC), 8-2.1408(OO), and 8-2.1410(C)(3) would require further evaluation of potential contamination issues and require remediation of any contamination that presents a public safety issue.

This impact would be **less than significant** under Alternative 3.

**Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types**

Exhibit 3.9-6 identifies known hazardous material and contamination sites in relation to assumed cannabis uses under Alternative 4. As shown in Exhibit 3.9-6, this alternative could locate six new cannabis uses near known contamination sites. Other new cannabis sites and relocated cultivation sites (assumed to be nine under this alternative) may also be located on sites where previously unknown contamination is discovered through site construction. As noted above, implementation of CLUO Sections 8-2.1408(CC), 8-2.1408(OO), and 8-2.1410(C)(3) would require further evaluation of potential contamination issues and require remediation of any contamination that presents a public safety issue.

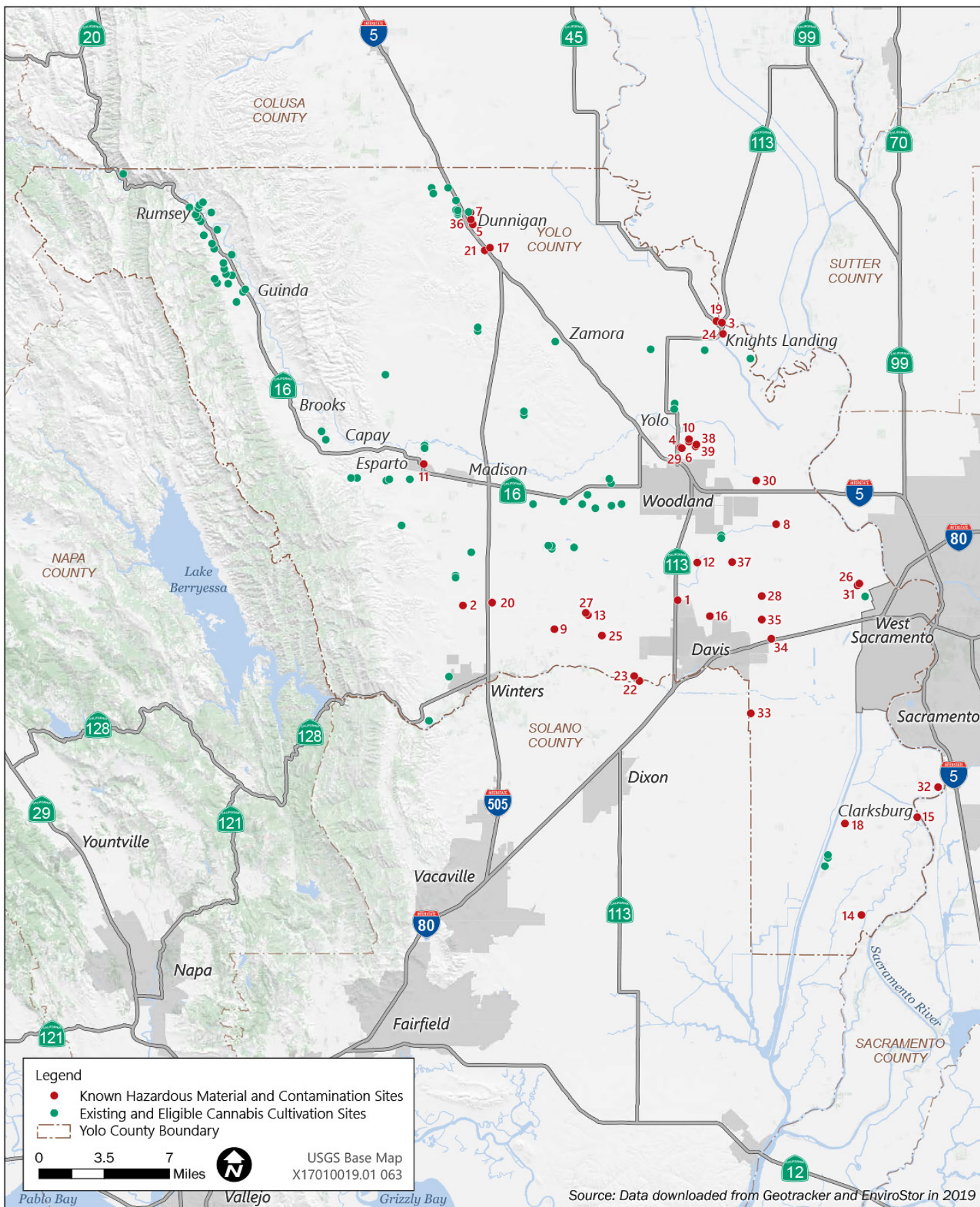
This impact would be **less than significant** under Alternative 4.

**Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail**

Exhibit 3.9-7 identifies known hazardous material and contamination sites in relation to assumed cannabis uses under Alternative 5. As shown in Exhibit 3.9-7, this alternative could locate seven new cannabis uses near known contamination sites. Other new cannabis sites and relocated cultivation sites (assumed to be 30 under this alternative) may also be located on sites where previously unknown contamination is discovered through site construction. As noted above, implementation of CLUO Sections 8-2.1408(CC), 8-2.1408(OO), and 8-2.1410(C)(3) would require further evaluation of potential contamination issues and require remediation of any contamination that presents a public safety issue.

This impact would be **less than significant** under Alternative 5.

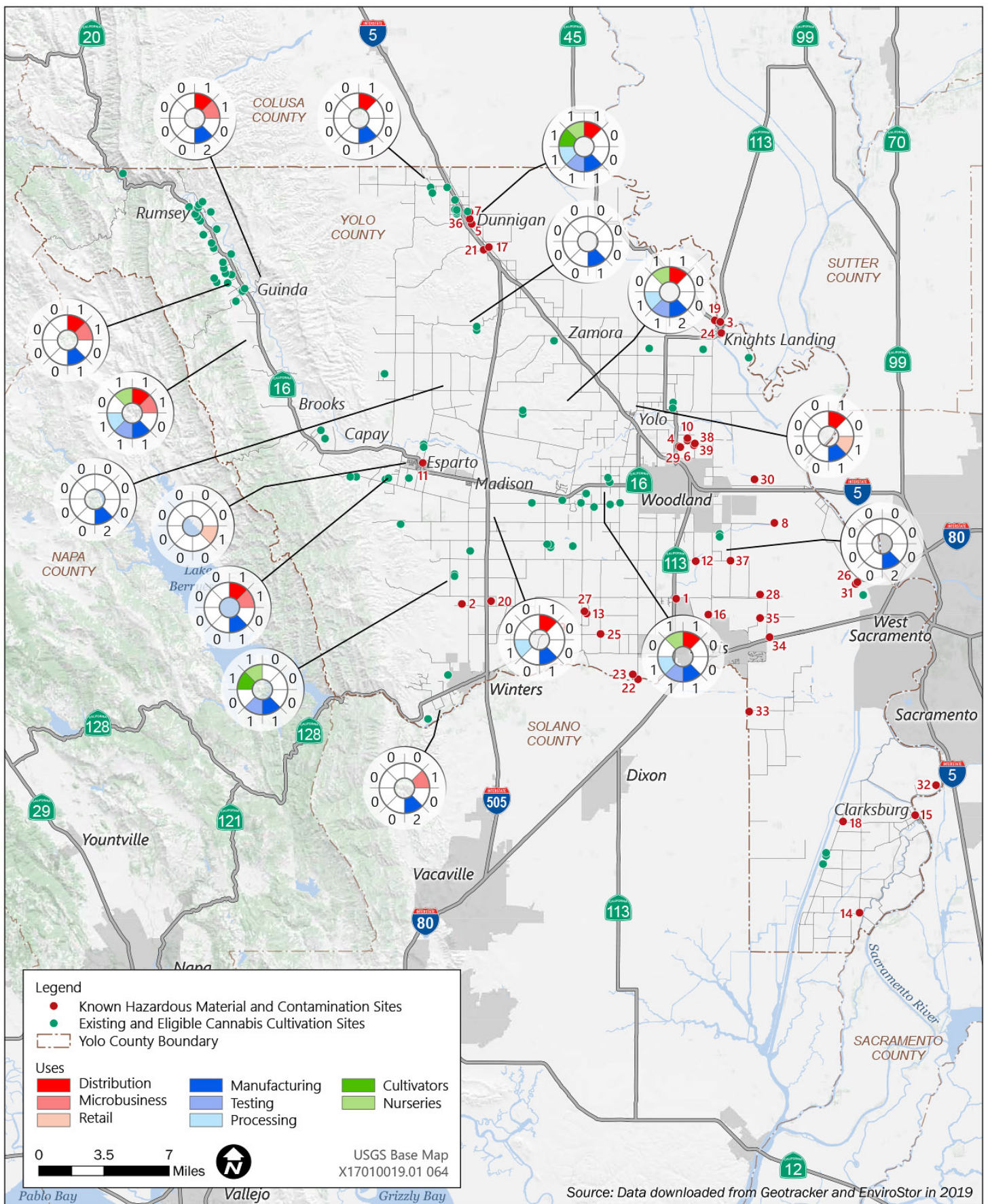




**Exhibit 3.9-3**

**Alternative 1 Cannabis Uses and Known Hazardous Material and Contamination Sites**

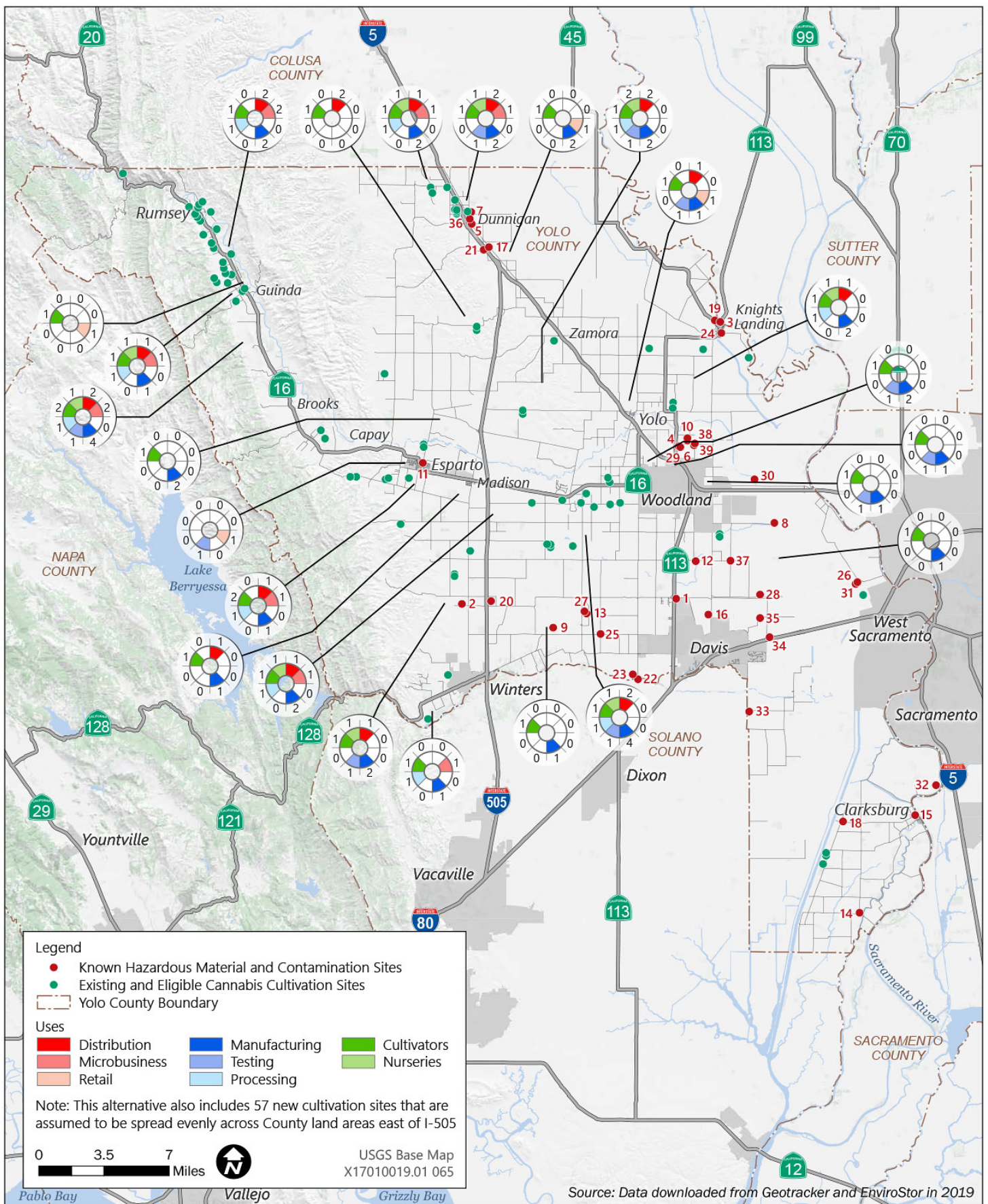




**Exhibit 3.9-4**

**Alternative 2 Cannabis Uses and Known Hazardous Material and Contamination Sites**

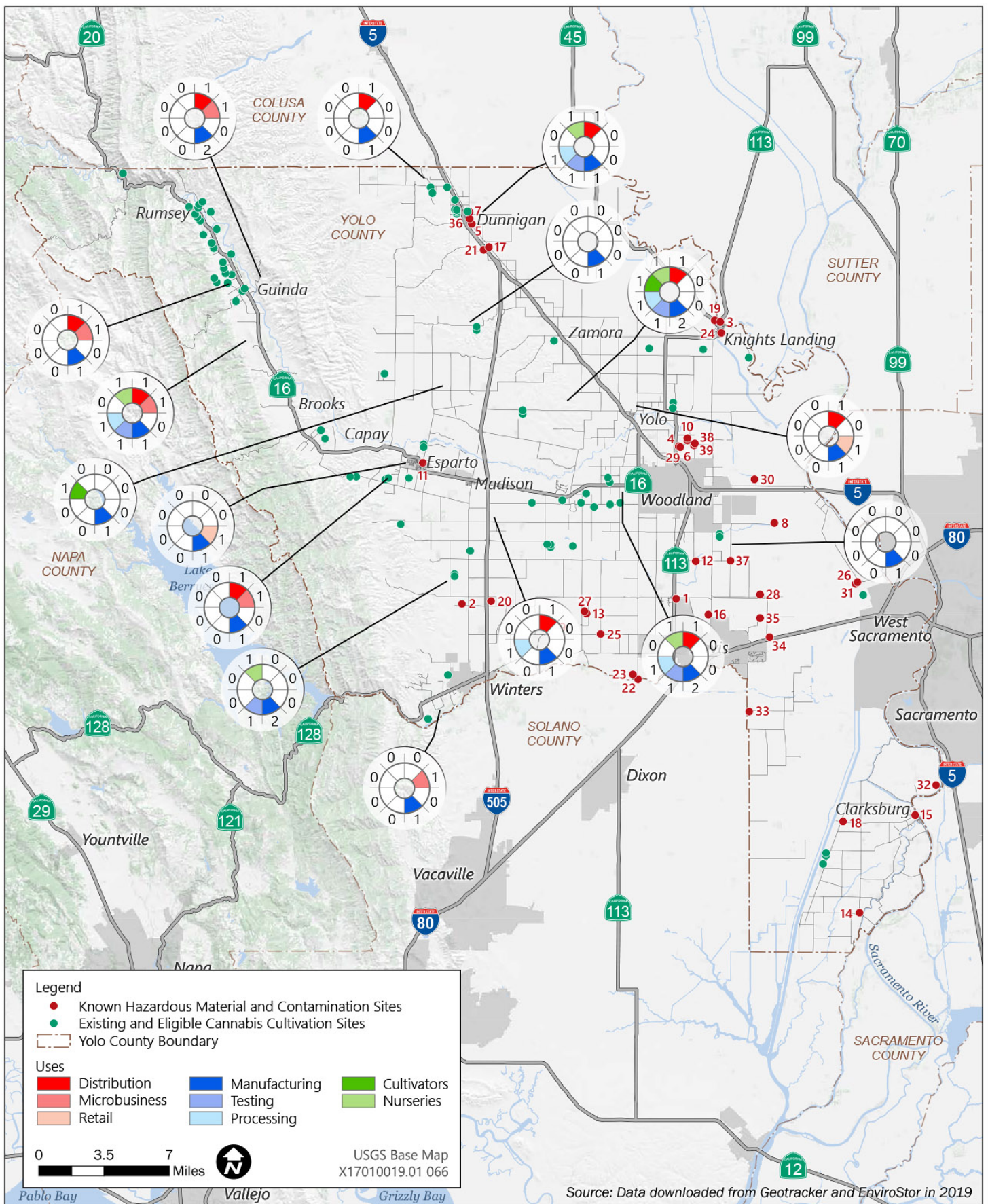




**Exhibit 3.9-5**

**Alternative 3 Cannabis Uses and Known Hazardous Material and Contamination Sites**

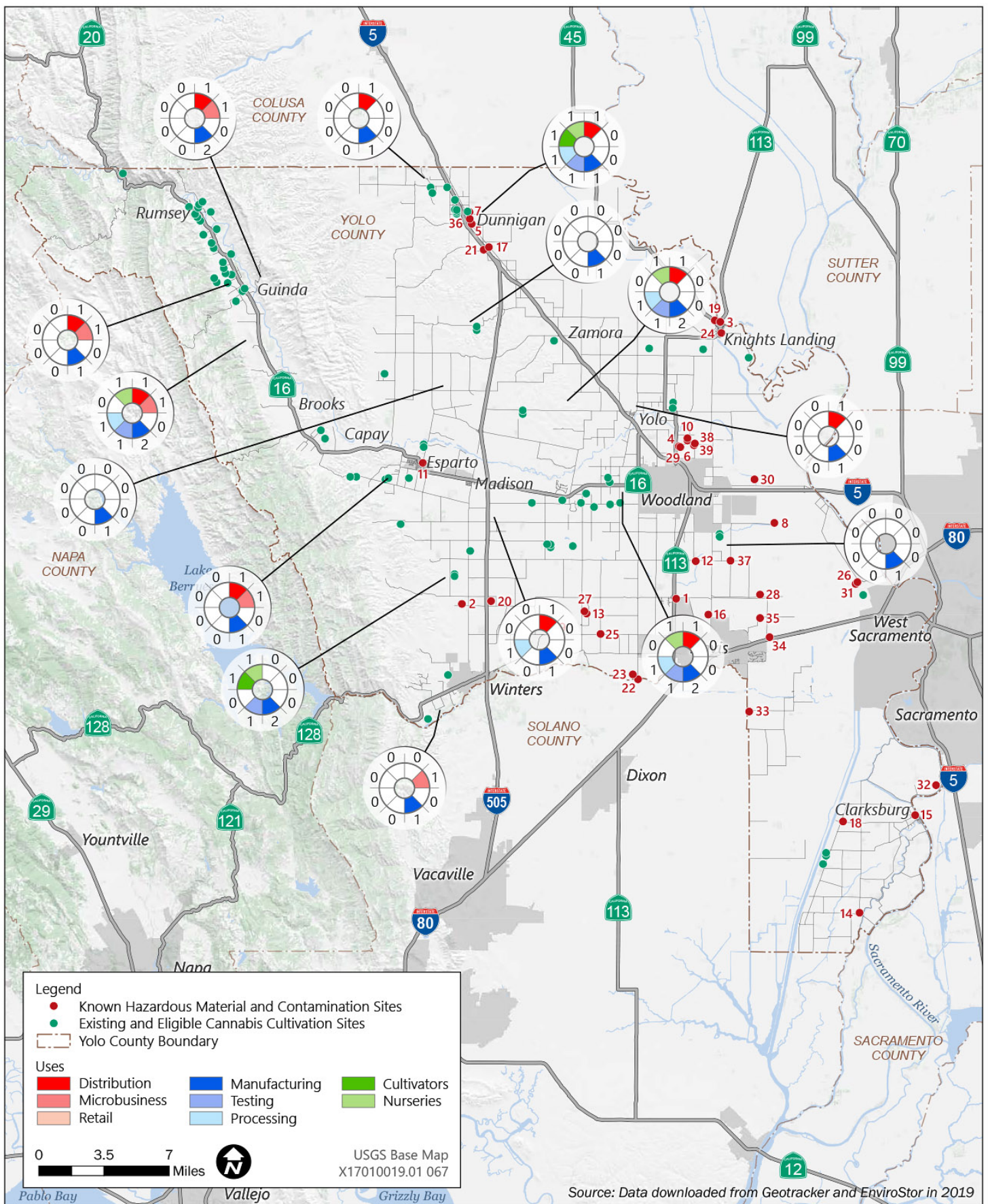




**Exhibit 3.9-6**

**Alternative 4 Cannabis Uses and Known Hazardous Material and Contamination Sites**





**Exhibit 3.9-7**

**Alternative 5 Cannabis Uses and Known Hazardous Material and Contamination Sites**

## Mitigation Measures

No mitigation is required for any of the alternatives.

### Impact HAZ-3: Emit Hazardous Emissions or Handle Hazardous Materials within 0.25 Mile of an Existing or Proposed School

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Adoption and implementation of the proposed CLUO, including subsequent Cannabis Use Permits pursuant to the adopted CLUO, would involve the use of pesticides, herbicides, rodenticides, and other chemicals for growing, processing, and manufacturing of cannabis and cannabis products. Materials used in processing, testing, manufacturing, and other activities would be used in accordance with the CLUO and state regulations to avoid the potential for accident or upset conditions. This impact would be **less than significant** for all alternatives.

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There are 73 public schools (K–12) throughout the cities and unincorporated area of Yolo County. Similar to many agricultural operations, commercial cannabis operations do involve the use of pesticides, herbicides, rodenticides, and other chemicals for growing, processing, and manufacturing of cannabis and cannabis products.

As described in Impact HAZ-1, CCR Title 17, Division 1, Chapter 13 Sections 40223(b), 40225(a)(b)(d)(e), and 40280(a), identified above, require implementation of safety measures for cannabis manufacturing operations that ensure protection of public health (including schools) and safety associated with the use of hazardous materials.

Cannabis uses and the associated use of pesticides and other hazardous materials would also be regulated under the state requirements noted above, and Section 8-2.1408(A) and Section 8-2.1408(W) of the CLUO include standards to protect public health (including schools) and the environment that would limit the extent and type of pesticides used, as well as standards related to the handling and storage of hazardous materials and training requirements related to them. Implementation of these regulations, along with compliance with manufacturers' instructions, would avoid significant impacts related to the use and handling of hazardous materials.

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. Given that personal outdoor cultivation would be an ancillary use to the residential parcel and would not involve large-scale use of pesticides or hazardous materials, no impacts on schools are expected.

#### **Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)**

Alternative 1 assumes the establishment of 1,000-foot buffers between schools and outdoor cultivation sites (existing and relocated outdoor cultivation sites).

As described in Impact HAZ-1, cultivation sites may use pesticides or other hazardous materials that would be regulated under state requirements and Section 8-2.1408(A) and Section 8-2.1408(W) of the CLUO, described above. These requirements restrict the type and extent of pesticides that can be used and include storage and handling requirements designed to protect human health and the environment (e.g., no use of restricted pesticides, use of storage requirements that include leak containment). Implementation of these regulations, along with compliance with manufacturers' instructions, would avoid significant impacts on public schools related to the use and handling of hazardous materials.

This impact would be **less than significant** under Alternative 1.

**Alternative 2: All License Types with Moderate Limits**

Alternative 2 assumes the establishment of 1,000-foot buffers between schools and outdoor cannabis uses (outdoor cultivation sites, outdoor nurseries, and outdoor cultivation at microbusinesses). However, no buffers are assumed for cannabis uses located in a greenhouse or building.

As described in Impact HAZ-1, CCR Title 17, Division 1, Chapter 13 Sections 40223(b), 40225(a)(b)(d)(e), and 40280(a), identified above, require implementation of safety measures for cannabis manufacturing operations that ensure protection of public health and safety. Cannabis uses and the associated use of pesticides and other hazardous materials would be regulated under the state requirements noted above, and Section 8-2.1408(A) and Section 8-2.1408(W) of the CLUO include standards to protect public health and the environment that would limit the extent and type of pesticides used, as well as standards related to the handling and storage of hazardous materials and training requirements related to them. Implementation of these regulations, along with compliance with manufacturers' instructions, would avoid significant impacts on public schools related to the use and handling of hazardous materials.

This impact would be **less than significant** under Alternative 2.

**Alternative 3: All License Types with High Limits**

Alternative 3 assumes the establishment of 75-foot buffers between schools and outdoor cannabis uses (outdoor cultivation sites, outdoor nurseries, and outdoor cultivation at microbusinesses). However, no buffers are assumed for cannabis uses located in a greenhouse or building.

As described in Impact HAZ-1, CCR Title 17, Division 1, Chapter 13 Sections 40223(b), 40225(a)(b)(d)(e), and 40280(a), identified above, require implementation of safety measures for cannabis manufacturing operations that ensure protection of public health and safety. Cannabis uses and the associated use of pesticides and other hazardous materials would be regulated under the state requirements noted above, and Section 8-2.1408(A) and Section 8-2.1408(W) of the CLUO include standards to protect public health and the environment that would limit the extent and type of pesticides used, as well as standards related to the handling and storage of hazardous materials and training requirements related to them. Implementation of these regulations, along with compliance with manufacturers' instructions, would avoid significant impacts on public schools related to the use and handling of hazardous materials.

This impact would be **less than significant** under Alternative 3.

**Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types**

Alternative 4 assumes no buffers from schools as it would not include any outdoor cannabis uses.

As described in Impact HAZ-1, CCR Title 17, Division 1, Chapter 13 Sections 40223(b), 40225(a)(b)(d)(e), and 40280(a), identified above, require implementation of safety measures for cannabis manufacturing operations that ensure protection of public health and safety. Cannabis uses and the associated use of pesticides and other hazardous materials would be regulated under the state requirements noted above, and Section 8-2.1408(A) and Section 8-2.1408(W) of the CLUO include standards to protect public health and the environment that would limit the extent and type of pesticides used, as well as standards related to the handling and storage of hazardous materials and training requirements related to them. Implementation of these regulations, along with compliance with manufacturers' instructions, would avoid significant impacts on public schools related to the use and handling of hazardous materials.

This impact would be **less than significant** under Alternative 4.

**Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail**

Alternative 5 assumes the establishment of 1,000-foot buffers between schools and outdoor cannabis uses (outdoor cultivation sites, outdoor nurseries, and outdoor cultivation at microbusinesses). However, no buffers are assumed for cannabis uses located in a greenhouse or building.

As described in Impact HAZ-1, CCR Title 17, Division 1, Chapter 13 Sections 40223(b), 40225(a)(b)(d)(e), and 40280(a), identified above, require implementation of safety measures for cannabis manufacturing operations that ensure protection of public health and safety. Cannabis uses and the associated use of pesticides and other hazardous materials would be regulated under the state requirements noted above, and Section 8-2.1408(A) and Section 8-2.1408(W) of the CLUO include standards to protect public health and the environment that would limit the extent and type of pesticides used, as well as standards related to the handling and storage of hazardous materials and training requirements related to them. Implementation of these regulations, along with compliance with manufacturers' instructions, would avoid significant impacts on public schools related to the use and handling of hazardous materials.

This impact would be **less than significant** under Alternative 5.

## Mitigation Measures

No mitigation is required for any of the alternatives.

## Impact HAZ-4: Result in a Safety Hazard or Noise for People Residing or Working within 2 Miles of a Public Airport or Public Use Airport

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Adoption and implementation of the proposed CLUO, including subsequent Cannabis Use Permits pursuant to the adopted CLUO, could involve locating cannabis uses near airports. The CLUO would require applications for new cannabis-related development near airports, and all such development would be required to comply with the applicable development standards and the associated Airport Land Use Compatibility Plan. Further, new cannabis uses would not result in new sensitive land uses or attract dense populations. This impact would be **less than significant** for all alternatives.

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Agricultural uses, such as cannabis cultivation, are not a regulated use under the CLUPs. However, noncultivation cannabis uses (manufacturing, distribution, testing, microbusinesses, retail, processing, and nurseries) would be required to comply with the applicable CLUP requirements for density and building heights as noted in Section 3.9.2, "Regulatory Setting." Sections 8-2.1408(F) and 8-2.1408(OO) of the CLUO require that design and construction of sites, as well as buildings and structures, shall comply with all applicable Yolo County codes, standards, regulations, and guidelines. This would include applicable restrictions associated with airport safety requirements for land uses consistent with General Plan Policies HS-5.1, HS-5.2, and HS-5.3.

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. Given that personal outdoor cultivation would be an ancillary use to the residential parcel, no impact on airport safety is expected.

### **Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)**

Alternative 1 is assumed to retain existing and eligible cannabis cultivation shown in Exhibit 2-4. Nine of the 78 existing and eligible cannabis cultivation sites are assumed to relocate under this alternative to comply with zoning standards under the CLUO. No expansion of cannabis uses would occur that could result in conflicts with airport safety.

This impact would be **less than significant** under Alternative 1.

**Alternative 2: All License Types with Moderate Limits**

Alternative 2 is assumed to retain the 78 existing or eligible cannabis cultivation sites (30 cultivation sites are assumed to relocate in order to comply with CLUO zoning and buffering standards) and result in two new cultivation sites. This alternative also assumes 52 noncultivation cannabis uses (manufacturing, distribution, testing, microbusinesses, retail, processing, and nurseries).

This alternative is assumed to expand cannabis uses that would provide approximately 700 new employees countywide. Some of these employees may be located near an airport. New cannabis uses would be required with applicable County requirements regarding airport safety. Land use compliance and airport safety are addressed through compliance with the CLUPs and Yolo County Code Section 8-2.903(f) (Airport Overlay Zones) and the development requirements in Section 8-2.906(f) and the CLUPs that address density, building heights, and hazards associated with electrical interference and bird strikes. These requirements would be required to be demonstrated in cannabis use site designs as required under CLUO Sections 8-2.1408(F) and 8-2.1408(OO).

This impact would be **less than significant** under Alternative 2.

**Alternative 3: All License Types with High Limits**

Alternative 3 is assumed to retain the 78 existing or eligible cannabis cultivation sites (nine cultivation sites are assumed to relocate in order to comply with CLUO zoning standards) and 82 new cultivation sites. Alternative 3 would also include 104 noncultivation cannabis uses.

This alternative is assumed to expand cannabis uses that would provide approximately 1,400 new employees countywide. Some of these employees may be located near an airport. New cannabis uses would be required with applicable County requirements regarding airport safety. Land use compliance and airport safety are addressed through compliance with the CLUPs and Yolo County Code Section 8-2.903(f) (Airport Overlay Zones) and the development requirements in Section 8-2.906(f) and the CLUPs that address density, building heights, and hazards associated with electrical interference and bird strikes. These requirements would be required to be demonstrated in cannabis use site designs as required under CLUO Sections 8-2.1408(F) and 8-2.1408(OO).

This impact would be **less than significant** under Alternative 3.

**Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types**

Alternative 4 is assumed to retain the 78 existing or eligible cannabis cultivation sites (nine cultivation sites are assumed to relocate in order to comply with CLUO zoning standards) and two new cultivation sites. Existing outdoor cannabis cultivation would convert to mixed-light or indoor cultivation that would operate in greenhouses or indoor buildings. Alternative 4 would also include 52 noncultivation cannabis uses.

This alternative would expand cannabis uses that would provide approximately 700 new employees countywide. Some of these employees may be located near an airport. New cannabis uses would be required with applicable County requirements regarding airport safety. Land use compliance and airport safety are addressed through compliance with the CLUPs and Yolo County Code Section 8-2.903(f) (Airport Overlay Zones) and the development requirements in Section 8-2.906(f) and the CLUPs that address density, building heights, and hazards associated with electrical interference and bird strikes. These requirements would be required to be demonstrated in cannabis use site designs as required under CLUO Sections 8-2.1408(F) and 8-2.1408(OO).

This impact would be **less than significant** under Alternative 4.

**Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail**

Alternative 5 is assumed to retain the 78 existing or eligible cannabis cultivation sites (30 cultivation sites are assumed to relocate in order to comply with CLUO zoning and buffering standards) and result in two new cultivation sites. This alternative also assumes 50 new noncultivation cannabis uses (manufacturing, distribution, testing, microbusinesses, processing, and nurseries).



This alternative is assumed to expand cannabis uses that would provide approximately 670 new employees countywide. Some of these employees may be located near an airport. New cannabis uses would be required with applicable County requirements regarding airport safety. Land use compliance and airport safety are addressed through compliance with the CLUPs and Yolo County Code Section 8-2.903(f) (Airport Overlay Zones) and the development requirements in Section 8-2.906(f) and the CLUPs that address density, building heights, and hazards associated with electrical interference and bird strikes. These requirements would be required to be demonstrated in cannabis use site designs as required under CLUO Sections 8-2.1408(F) and 8-2.1408(OO).

## Mitigation Measures

No mitigation is required for any of the alternatives.

## Impact HAZ-5: Impair or Physically Interfere with Emergency Response or Evacuation Plans

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Adoption and implementation of the proposed CLUO, including subsequent Cannabis Use Permits pursuant to the adopted CLUO, would not alter Yolo County's roadway network or create any physical barriers that would impede emergency response or implementation of evacuation plans. The CLUO would require applications for new cannabis-related development to comply with the applicable County fire and access standards. This impact would be **less than significant** for all alternatives.

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As noted in Section 3.9.2, "Regulatory Setting," Yolo County Emergency Evacuation Procedures identify evacuation zones to be used during large scale evacuation and shelter in place events. Evacuation zones are identified at the "Know Your Zone" web mapping application at [evacuate.yolocounty.org](http://evacuate.yolocounty.org). Evacuation routes generally follow major highways and roads, and rally points are identified in each zone.

Sections 8-2.1408(F) and 8-2.1408(OO) of the CLUO require that design and construction of sites comply with all applicable Yolo County codes, standards, regulations, and guidelines. In addition, Sections 8-2-1408(K) and 8-2-1408(Q) require that adequate site access is adequately designed and maintained for fire and emergency access consistent with Fire Code and Yolo County Improvement Standards.

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. Given that personal outdoor cultivation would be an ancillary use to the residential parcel, no impacts on emergency response or evaluation are expected.

### **Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)**

This alternative assumes the retention of the current extent of cannabis cultivation that is allowed in the County. Nine of the 78 existing and eligible cannabis cultivation sites are assumed to relocate under this alternative to comply with zoning standards under the CLUO. Sections 8.2-1408(K) and 8.2-1408(Q) of the CLUO would require that adequate site access is adequately designed and maintained for fire and emergency access consistent with Fire Code and County Improvement Standards for existing cultivation sites under Alternative 1. Implementation of these requirements would ensure that adequate access is provided for emergency use and evacuation.

This impact would be **less than significant** under Alternative 1.

### **Alternative 2: All License Types with Moderate Limits**

As shown in Exhibit 2-5, this alternative assumes the expansion cannabis uses to include noncultivation uses that for analysis purposes, could be concentrated along the State Route (SR) 16 corridor west of the City of Woodland (22 new cannabis sites). Sections 8.2-1408(K) and 8.2-1408(Q) of the CLUO would require that site access is adequately designed and maintained for fire and emergency access consistent with Fire Code and



Yolo County Improvement Standards for cannabis sites. None of the assumed cannabis uses would alter the County's roadway facilities in a manner that would slow emergency response and evacuation. As identified in the traffic analysis provided in Section 3.14, "Transportation and Circulation," and in Appendix G, the cannabis uses assumed for this alternative would not create new significant traffic congestion.

This impact would be **less than significant** under Alternative 2.

#### **Alternative 3: All License Types with High Limits**

As shown in Exhibit 2-6, this alternative assumes the expansion cannabis uses to include noncultivation uses that for analysis purposes, could be concentrated along the SR 16 corridor west of the City of Woodland (40 new cannabis sites) and along I-5 (42 new cannabis sites). Sections 8.2-1408(K) and 8.2-1408(Q) of the CLUO would require that site access is adequately designed and maintained for fire and emergency access consistent with Fire Code and Yolo County Improvement Standards for cannabis sites. None of the assumed cannabis uses would alter the County's roadway facilities in a manner that would slow emergency response and evacuation. As identified in the traffic analysis provided in Section 3.14, "Transportation and Circulation," and in Appendix G, the cannabis uses assumed for this alternative would not create new significant traffic congestion.

This impact would be **less than significant** under Alternative 3.

#### **Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types**

As shown in Exhibit 2-7, this alternative assumes the expansion cannabis uses to include noncultivation uses that for analysis purposes, could be concentrated along the SR 16 corridor west of the City of Woodland (24 new cannabis sites). Sections 8.2-1408(K) and 8.2-1408(Q) of the CLUO would require that site access is adequately designed and maintained for fire and emergency access consistent with Fire Code and Yolo County Improvement Standards for cannabis sites. None of the assumed cannabis uses would alter the County's roadway facilities in a manner that would slow emergency response and evacuation. As identified in the traffic analysis provided in Section 3.14, "Transportation and Circulation," and in Appendix G, the cannabis uses assumed for this alternative would not create new significant traffic congestion.

This impact would be **less than significant** under Alternative 4.

#### **Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail**

As shown in Exhibit 2-8, this alternative assumes the expansion cannabis uses to include noncultivation uses that for analysis purposes, could be concentrated along the SR 16 corridor west of the city of Woodland (21 new cannabis sites). Sections 8.2-1408(K) and 8.2-1408(Q) of the CLUO would require that site access is adequately designed and maintained for fire and emergency access consistent with Fire Code and Yolo County Improvement Standards for cannabis sites. None of the assumed cannabis uses would alter the County's roadway facilities in a manner that would slow emergency response and evacuation. As identified in the traffic analysis provided in Section 3.14, "Transportation and Circulation," and in Appendix G, the cannabis uses assumed for this alternative would not create new significant traffic congestion.

This impact would be **less than significant** under Alternative 5.

## **Mitigation Measures**

No mitigation is required for any of the alternatives.

## Impact HAZ-6: Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Wildfires, Exacerbate Wildfire Risks from Installation of Infrastructure, or Expose People or Structures to Significant Risks Due to Postfire Conditions

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Adoption and implementation of the proposed CLUO, including subsequent Cannabis Use Permits pursuant to the adopted CLUO, could locate cannabis uses in wildfire hazard areas and increase wildfire risks. Implementation of the CLUO and compliance with California Fire Code requirements would ensure that cannabis uses incorporate fire protection measures that would avoid an increased risk of wildfire and increased exposure to wildfire hazards and associated affects from a wildfire event. This impact would be **less than significant** for all alternatives.

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As shown in Exhibit 3.9-2, the western portion of County is located within a State Responsibility Area with fire severity ratings of moderate for most of the area and high and very high for hillside and mountain areas. There were two major wildfires in the County in 2018 involving a total of 91,110 acres between Yolo County and Napa County. The development of new cannabis uses could increase wildfire risk to residents and buildings through:

- placement of new structures and increased numbers of people in areas with moderate to high wildfire risk,
- installation of electrical infrastructure that would introduce potential ignition sources, and
- use of chemicals and chemical processes that would be potential ignition sources if handled incorrectly.

Increased potential for wildfires could also pose risks to public health through smoke conditions that may create unhealthy levels of particulate matter. Exposure to PM<sub>2.5</sub> can result in significant health problems, including aggravated asthma, increased susceptibility to respiratory infections, and increased risk of heart attacks and arrhythmias in people with heart disease (Sacramento Metropolitan Air Quality Management District 2019).

Construction of cannabis uses on areas previously burned could also create soil erosion and stability issues due to the loss of vegetation.

In addition to California Fire Code requirements regarding construction requirements for buildings, state regulations that address and minimize wildfire hazards through vegetation management and building design that would apply to cannabis uses include the following:

- PRC Section 4291: This section requires a person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material to maintain defensible space of 100 feet from each side and from the front and rear of the structure. The amount of fuel modification necessary shall take into account the flammability of the structure as affected by building material, building standards, location, and type of vegetation. Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure.
- CCR Title 24, Part 2, Section 701A.3.2 (New Buildings Located in Any Fire Hazard Severity Zone): These standards for building design associated with roof structure, attic ventilation, and exterior walls to prevent the intrusion of flames and embers.

CCR Title 17, Division 1, Chapter 13 provides the following fire safety requirements for cannabis manufacturing uses, which require fire control measures that include proper handling of flammable materials to avoid fire hazards and engineering of the closed loop extraction systems to accepted engineering practices that meet fire code and avoid accidental fire events:

- Section 40223(b): Ethanol extraction operations shall be approved by the local fire code official and shall be operated in accordance with applicable Division of Occupational Safety and Health (Cal/OSHA) regulations and any other state and local requirements.

- Section 40225(b): Professional closed loop systems, other equipment used, the extraction operation, and facilities must be approved for use by the local fire code official and comply with any required fire, safety, and building code requirements related to the processing, handling, and storage of the applicable solvent or gas.
- Section 40225(d): The licensee shall establish and implement written procedures to document that the closed loop extraction system is maintained in accordance with the equipment manufacturer specifications and to ensure routine verification that the system is operating in accordance with specifications and continues to comply with fire, safety, and building code requirements.
- Section 40280(a): The licensee shall implement a training program to ensure that all personnel present at the premises are provided information and training that covers health and safety hazards and emergency response procedures.

The CLUO provides the following performance standards, which address fire hazards through fire breaks; provision of emergency and fire access to sites and buildings; and compliance with building, electrical, and fire codes that are intended to ensure that cannabis uses do not create a new fire hazard. Permittees would be required to demonstrate compliance with the fire hazard protection measures through site design details under Section 8-2.1408(OO):

- Section 8-2.1408(F) requires compliance with the California Building, Electrical, and Fire Codes as adopted by the County, and ensures adequate access, water availability, and other conditions for fire protection as applicable for the location and use/activity. Permittees shall manage vegetation and maintain fire breaks to minimize fire danger.
- Section 8-2.1408(K) requires all operations to have a rapid entry system for use by emergency personnel, and the permittee is required to “install/undertake appropriate actions and/or improvements identified by the County Engineer or District Fire Chief.” This standard also requires that driveways provide an all-weather surface.
- Section 8-2.1408(Q) requires “all uses to comply with the California Building, Electrical, and Fire Codes to ensure adequate access, water availability, and other conditions for fire protection as applicable for the location and use/activity.”
- Section 8-2.1408(FF) requires that sites have adequate parking that would not obstruct emergency or fire access to the area.

These CLUO standards are consistent with General Plan Policies HS-3.1, PF-5.3, and PF-5.8, and Actions HS-A38, HS-A39, HS-A44, HS-A45, and PF-A29, which identify the need for fire protection measures to address wildfire hazards.

As discussed in Section 3.7, “Geology and Soils,” SWRCB Order WQ 2019-0001-DWQ contains requirements for cannabis cultivation that require the use of soil erosion and sedimentation controls (BMPs) for soil stability and the implementation of a Site Erosion and Sediment Control Plan and Disturbed Area Stabilization Plan for higher risk sites. CLUO Section 8-2.1408(V) includes soil stabilization requirements, and Section 8-2.1408(F) of the CLUO requires that design and construction of buildings and structures shall comply with all applicable County codes, standards, regulations, and guidelines. Compliance with these standards would ensure stability of cannabis sites that may be located on parcels previously burned by a wildfire.

When hillsides are denuded of their surface vegetation and soil cover following a fire, resulting increases in runoff and erosion may occur. Burned areas generally regenerate naturally within a few (two to four) years, and these post-fire risks are significantly reduced as bare soil revegetates. This is less of an issue in agricultural areas where exposure to people and structures is minimal. Section 8-2.1408(V) of the CLUO includes the following soil stabilization requirements and performance standards for all cannabis uses, that would also apply sites that have been burned:

Grading/Land Clearing – No grading or land clearing for cannabis activities may occur without prior authorization pursuant to an approved Cannabis Use Permit, and a County Grading Permit, if applicable. Grading or land clearing in advance of approved permits is grounds for denial/revocation of any County Cannabis Use Permit and/or County Cannabis License. Grading and drainage shall be implemented in a manner that prevent soil erosion, and the accumulation of water, except in areas intended for retention. Grading and/or land clearing requires the issuance of a County Grading Permit and must be conducted subject to a State construction storm water permit, if applicable. CDFA licensees shall demonstrate compliance with the principles and guidelines for discharge and water quality contained in the Cannabis Cultivation Policy of the State Water Resources Control Board. Excessive grading and disturbance shall be avoided. Cannabis activities on slopes of ten percent or greater require review and approval by the County Engineer to ensure the application of appropriate environmental protections and best management practices to control for erosion, sedimentation, and water quality to acceptable levels. A geotechnical analysis by a licensed civil engineer in the State of California may be required at the County's discretion, to minimize erosion, sedimentation, and water quality to acceptable levels.

Alternatives 1, 2, 3, and 5 assume that personal use outdoor cultivation may occur in any zoning district on a parcel with a legal residence. Personal use outdoor cultivation of up to six plants is assumed to occur within pots or garden areas on the grounds of the parcel. Alternative 4 would limit personal use cultivation to indoor only. These activities would likely involve no more than 100 square feet of land area and would be required to be outside of front yard and side yard setback areas. Given the minor extent of this use, no wildfire hazard impacts are expected.

**Alternative 1: Cultivation (Ancillary Nurseries and Processing Only) with Existing Limits (Existing Operations with CLUO) (CEQA Preferred Alternative)**

This alternative assumes the retention of the current extent of cannabis cultivation that is allowed in the County. As shown in Exhibit 3.9-8, there are several cultivation sites within the moderate fire hazard severity zone and one eligible site within the very high fire hazard severity zone. Nine of the 78 existing and eligible cannabis cultivation sites are assumed to relocate under this alternative to comply with zoning standards under the CLUO.

Cannabis sites would be required to comply with PRC Section 4291 and CLUO Section 8-2.1408(F) for provision of fire breaks to protect buildings and avoid the spread of wildfire; CCR Title 24, Part 2, Section 701A3.2 and CLUO Section 8-2.1408(Q) for building design to be fire resistant and avoid the creation of a fire; and CLUO Section 8-2.1408(K) to ensure adequate access. Compliance with these standards would ensure that relocated cultivation uses do not create or increase wildfire hazards to residents or buildings.

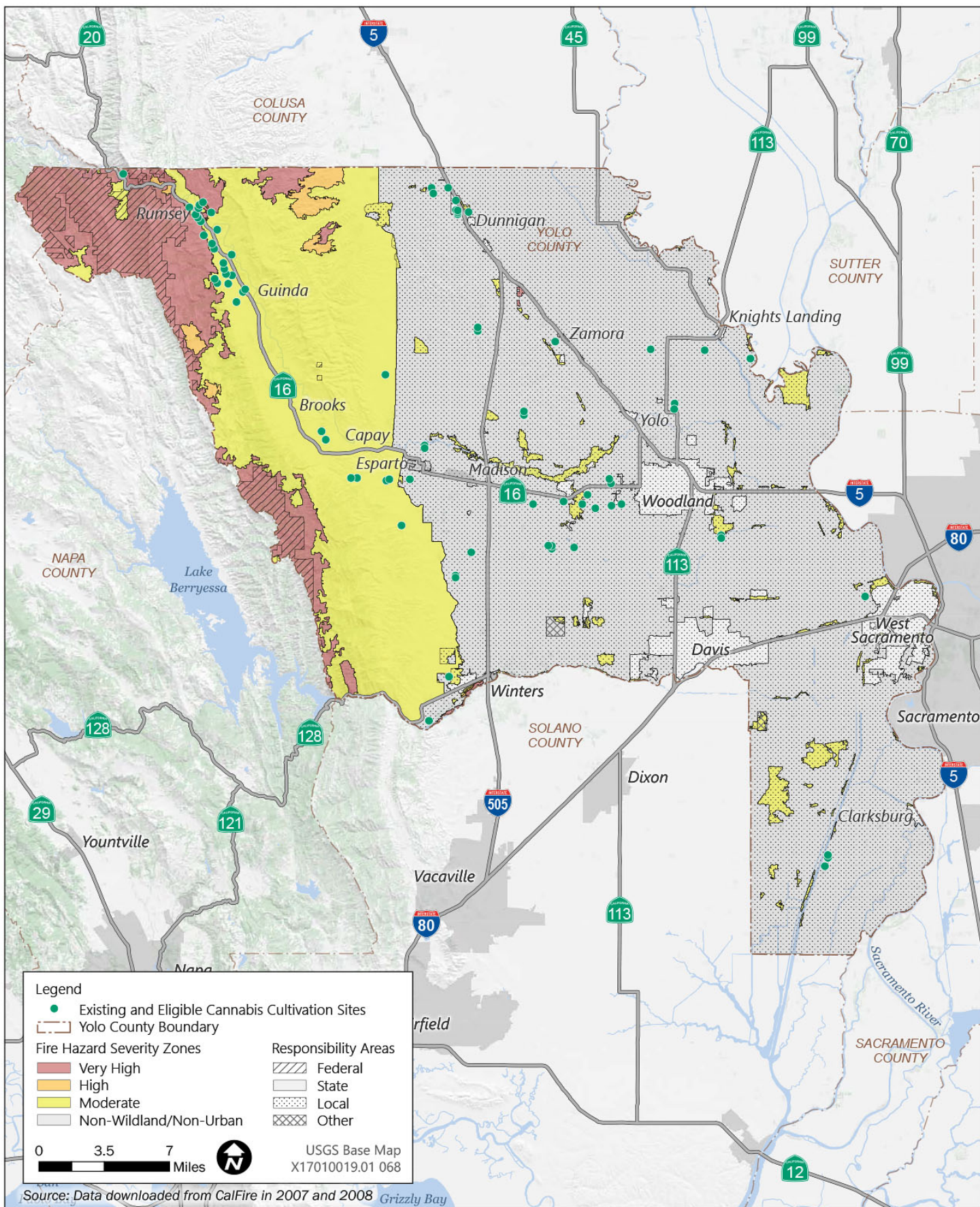
This impact would be **less than significant** under Alternative 1.

**Alternative 2: All License Types with Moderate Limits**

As shown in Exhibit 3.9-9, Alternative 2 is assumed to locate 21 new cannabis uses within the moderate fire hazard severity zone. The assumed 30 relocations of the 78 existing and eligible cultivation sites to comply with the zoning and buffering standards of the CLUO may also place additional cannabis uses in this area. Manufacturing operations (six are assumed to be located in the moderate fire hazard severity zone) could employ volatile extraction methods to create cannabis products. Volatile extraction may involve the use of butane, carbon dioxide, chlorofluorocarbons, hydrocarbon, or other fluorinated gases. These facilities could create new ignition sources for wildfires or could worsen a wildfire event should the facility catch fire.

Cannabis uses would be required to comply with PRC Section 4291 and CLUO Section 8-2.1408(F) for provision of fire breaks to protect buildings and avoid the spread of wildfire; CCR Title 24, Part 2, Section 701A3.2 and CLUO Section 8-2.1408(Q) for building design to be fire resistant and avoid the creation of a fire; and CLUO Section 8-2.1408(K) to ensure adequate access. Manufacturing uses would be required to comply with CCR Title 17, Division 1, Chapter 13, Sections 40223(b), 40225(b), 40225(d), and 40280(a), which require fire control measures that include proper handling of flammable materials to avoid fire hazards and engineering of the closed loop extraction systems to avoid accidental fire events. Compliance with these standards would ensure that cannabis uses do not create or increase wildfire hazards to residents or buildings.

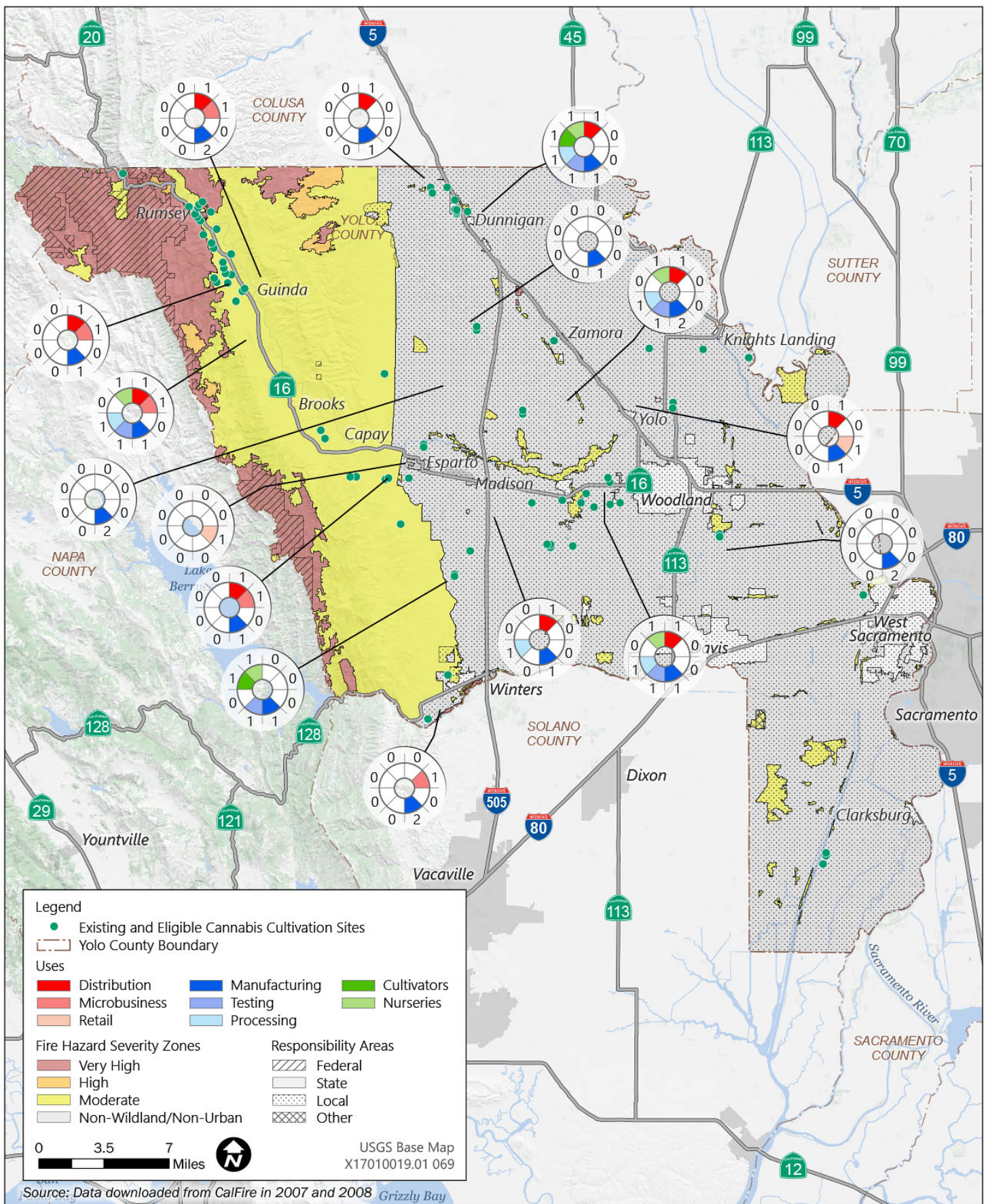




**Exhibit 3.9-8**

**Alternative 1 Cannabis Uses and Fire Hazard Designations**





**Exhibit 3.9-9**

**Alternative 2 Cannabis Uses and Fire Hazard Designations**



This impact would be **less than significant** under Alternative 2.

**Alternative 3: All License Types with High Limits**

As shown in Exhibit 3.9-10, Alternative 3 is assumed to locate 35 new cannabis uses within the moderate fire hazard severity zone. The assumed nine relocations of the 78 existing and eligible cultivation sites to comply with the zoning standards of the CLUO may also place additional cannabis uses in this area. Manufacturing operations (nine are assumed to be located in the moderate fire hazard severity zone) could employ volatile extraction methods to create cannabis products. Volatile extraction may involve the use of butane, carbon dioxide, chlorofluorocarbons, hydrocarbon, or other fluorinated gases. These facilities could create new ignition sources for wildfires or could worsen a wildfire event should the facility catch fire.

Cannabis uses would be required to comply with PRC Section 4291 and CLUO Section 8-2.1408(F) for provision of fire breaks to protect buildings and avoid the spread of wildfire; CCR Title 24, Part 2, Section 701A3.2 and CLUO Section 8-2.1408(Q) for building design to be fire resistant and avoid the creation of a fire; and CLUO Section 8-2.1408(K) to ensure adequate access. Manufacturing uses would be required to comply with CCR Title 17, Division 1, Chapter 13, Sections 40223(b), 40225(b), 40225(d), and 40280(a), which require fire control measures that include proper handling of flammable materials to avoid fire hazards and engineering of the closed loop extraction systems to avoid accidental fire events. Compliance with these standards would ensure that cannabis uses do not create or increase wildfire hazards to residents or buildings.

This impact would be **less than significant** under Alternative 3.

**Alternative 4: Mixed-Light/Indoor License Types Only with Moderate Limits, No Hoop Houses or Outdoor Types**

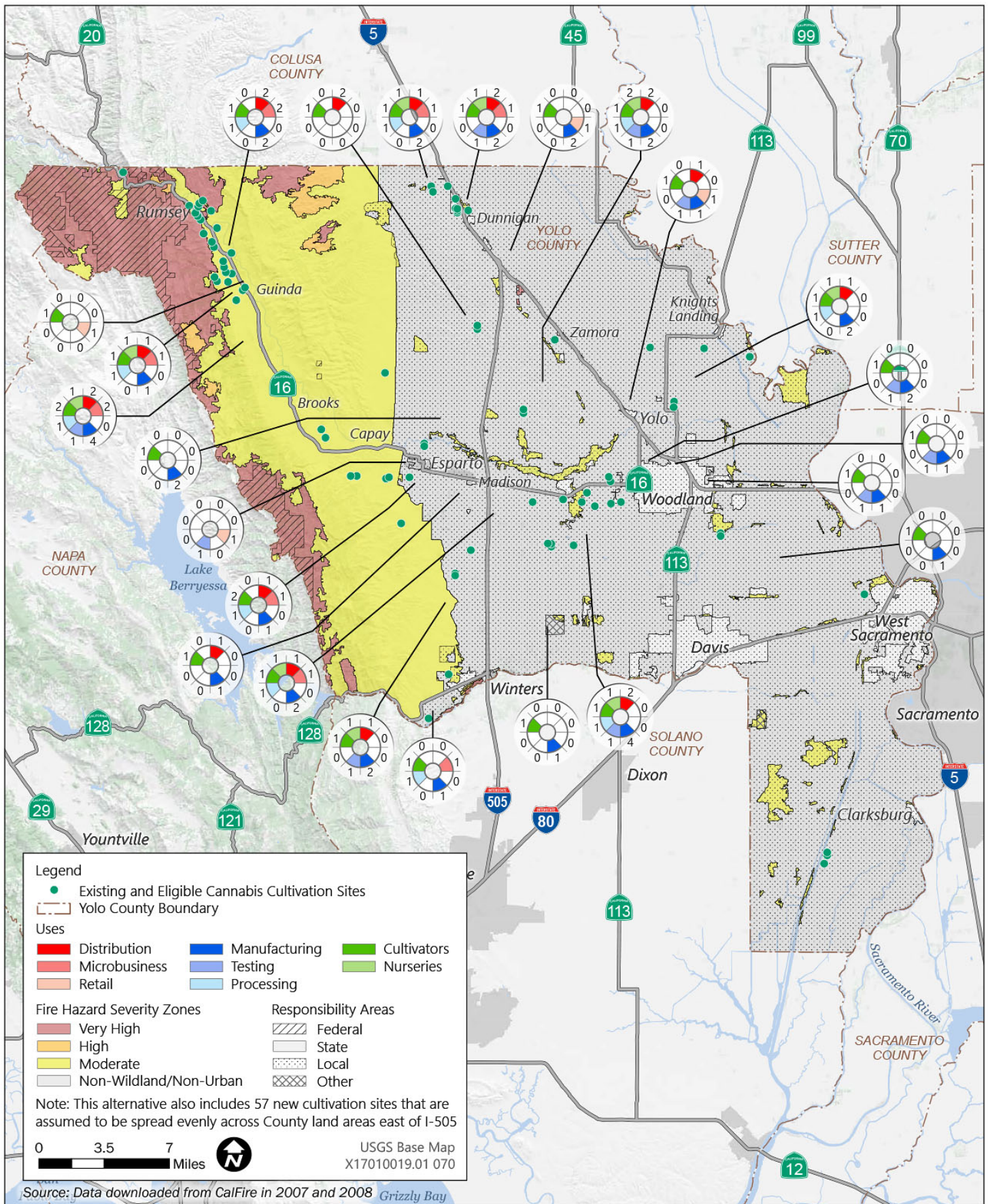
As shown in Exhibit 3.9-11, Alternative 4 is assumed to locate 20 new cannabis uses within the moderate fire hazard severity zone. The assumed nine relocations of the 78 existing and eligible cultivation sites to comply with the zoning standards of the CLUO may also place additional cannabis uses in this area. Manufacturing operations (seven are assumed to be located in the moderate fire hazard severity zone) could employ volatile extraction methods to create cannabis products. Volatile extraction may involve the use of butane, carbon dioxide, chlorofluorocarbons, hydrocarbon, or other fluorinated gases. These facilities could create new ignition sources for wildfires or could worsen a wildfire event should the facility catch fire.

Cannabis uses would be required to comply with PRC Section 4291 and CLUO Section 8-2.1408(F) for provision of fire breaks to protect buildings and avoid the spread of wildfire; CCR Title 24, Part 2, Section 701A3.2 and CLUO Section 8-2.1408(Q) for building design to be fire resistant and avoid the creation of a fire; and CLUO Section 8-2.1408(K) to ensure adequate access. Manufacturing uses would be required to comply with CCR Title 17, Division 1, Chapter 13, Sections 40223(b), 40225(b), 40225(d), and 40280(a), which require fire control measures that include proper handling of flammable materials to avoid fire hazards and engineering of the closed loop extraction systems to avoid accidental fire events. Compliance with these standards would ensure that cannabis uses do not create or increase wildfire hazards to residents or buildings.

This impact would be **less than significant** under Alternative 4.

**Alternative 5: All License Types with Moderate Limits, within Agricultural Zones Only, No Retail**

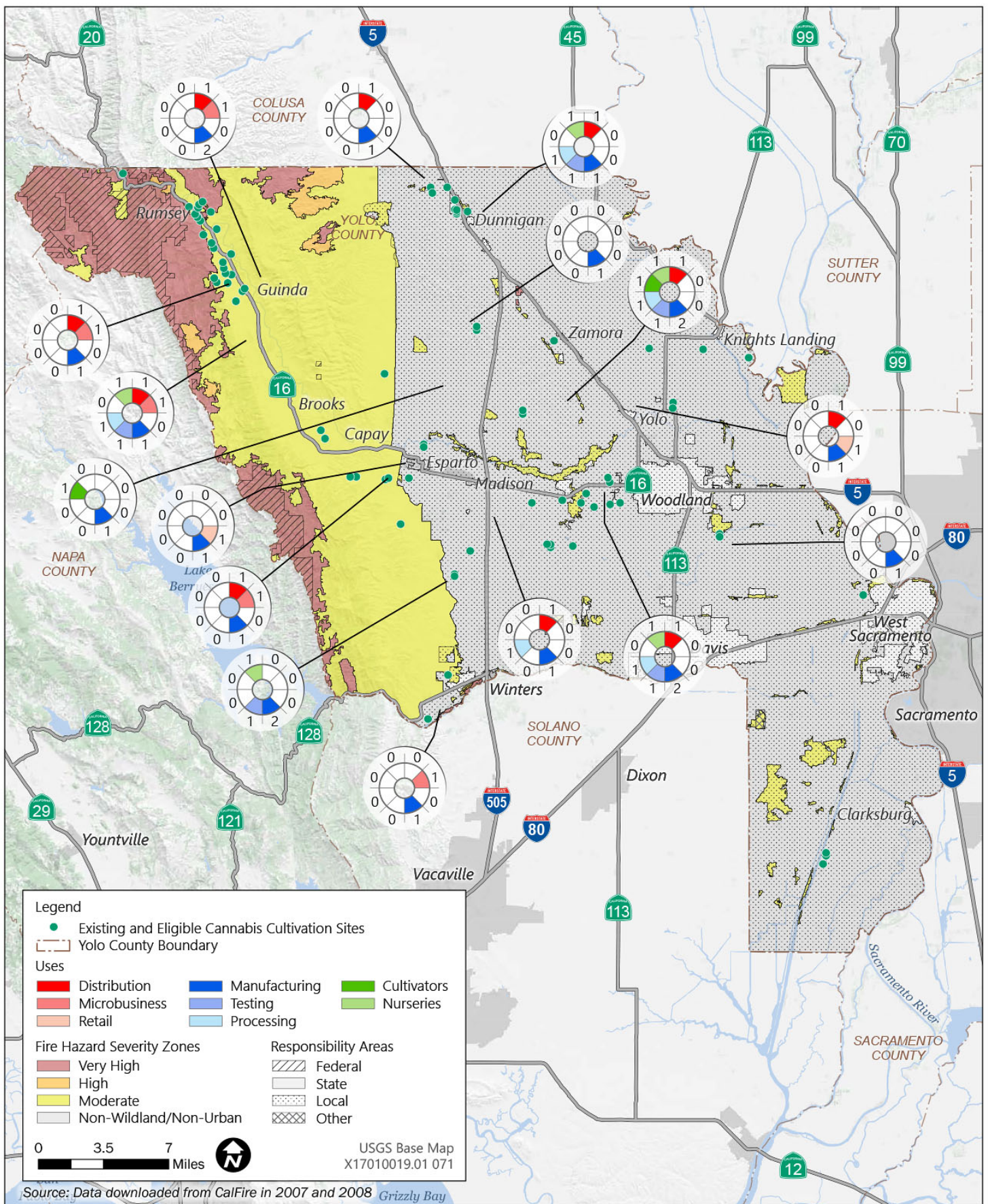
As shown in Exhibit 3.9-12, Alternative 5 is assumed to locate 21 new cannabis uses within the moderate fire hazard severity zone. The assumed 30 relocations of the 78 existing and eligible cultivation sites to comply with the zoning and buffer standards of the CLUO may also place additional cannabis uses in this area. Manufacturing operations (eight are assumed to be located in the moderate fire hazard severity zone) could employ volatile extraction methods to create cannabis products. Volatile extraction may involve the use of butane, carbon dioxide, chlorofluorocarbons, hydrocarbon, or other fluorinated gases. These facilities could create new ignition sources for wildfires or could worsen a wildfire event should the facility catch fire.



**Exhibit 3.9-10**

**Alternative 3 Cannabis Uses and Fire Hazard Designations**

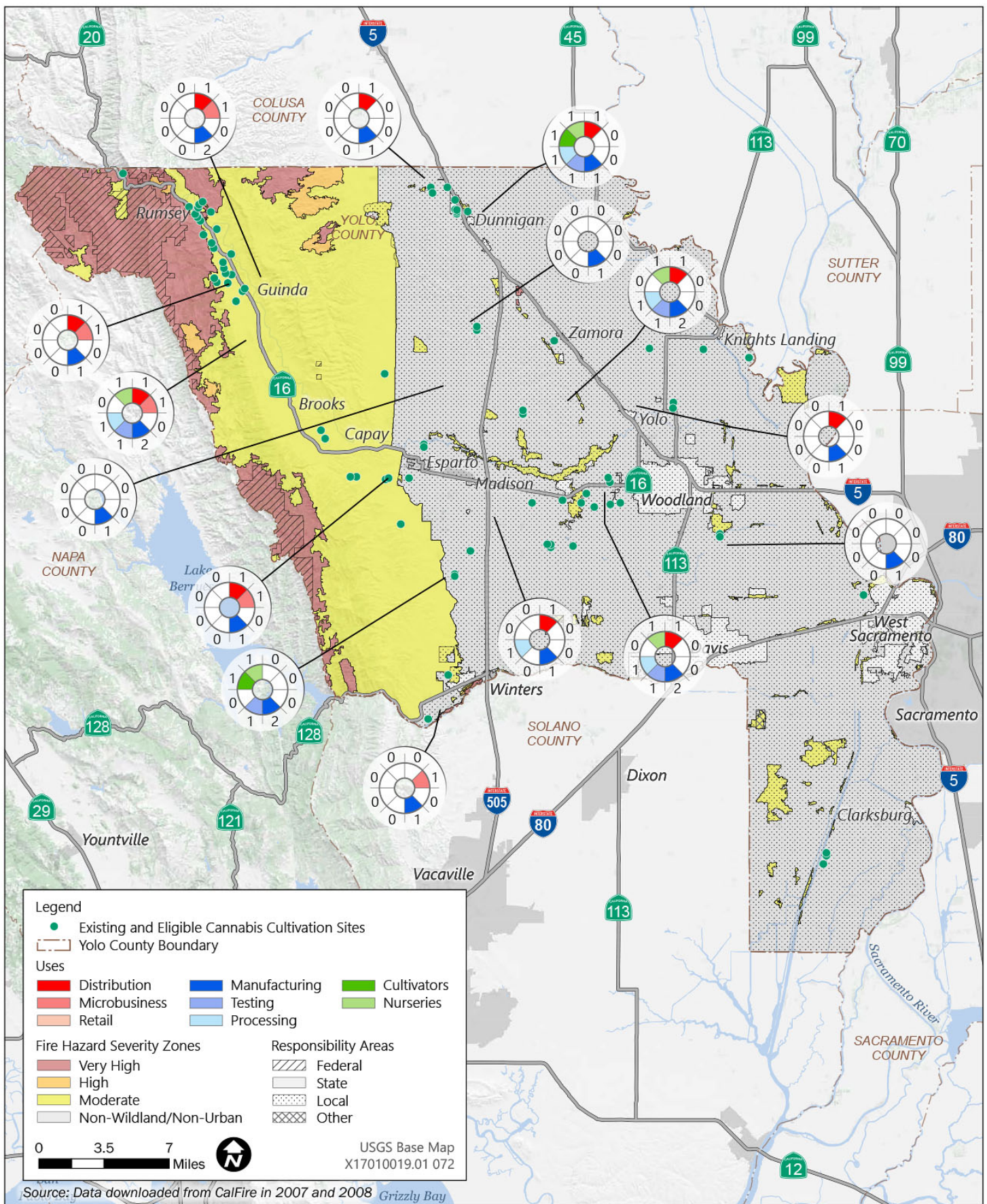




**Exhibit 3.9-11**

**Alternative 4 Cannabis Uses and Fire Hazard Designations**





**Exhibit 3.9-12**

**Alternative 5 Cannabis Uses and Fire Hazard Designations**

Cannabis uses would be required to comply with PRC Section 4291 and CLUO Section 8-2.1408(F) for provision of fire breaks to protect buildings and avoid the spread of wildfire; CCR Title 24, Part 2, Section 701A3.2 and CLUO Section 8-2.1408(Q) for building design to be fire resistant and avoid the creation of a fire; and CLUO Section 8-2.1408(K) to ensure adequate access. Manufacturing uses would be required to comply with CCR Title 17, Division 1, Chapter 13, Sections 40223(b), 40225(b), 40225(d), and 40280(a), which require fire control measures that include proper handling of flammable materials to avoid fire hazards and engineering of the closed loop extraction systems to avoid accidental fire events. Compliance with these standards would ensure that cannabis uses do not create or increase wildfire hazards to residents or buildings.

This impact would be **less than significant** under Alternative 5.

### **Mitigation Measures**

No mitigation is required for any of the alternatives.

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