# 4.8 HAZARDS AND HAZARDOUS MATERIALS

This chapter discusses hazards and hazardous materials issues in Vacaville and evaluates the potential hazard and hazardous materials impacts resulting from the spatial location of development that would be allowed by the proposed General Plan, as well as implementation of the Energy and Conservation Action Strategy (ECAS). The following evaluation assesses hazardous materials, wildfire hazards, emergency response and evacuation plans, and airport hazards. City fire protection services are discussed in Chapter 4.13, Public Services and Recreation. As noted in Chapter 3, Project Description, impacts are determined by comparing the proposed General Plan and ECAS to existing conditions, rather than to the existing General Plan. The following evaluation is based on a spatial analysis and identifies whether potential development would be located on a hazardous material site or would create or expose the public, structures, or the environment to hazards or hazardous materials.

## *A. Regulatory Framework*

The following section discusses hazards and hazardous materials policies and regulations from regulatory agencies that have jurisdiction over hazards and hazardous materials in Vacaville.

### 1. Federal Regulations

Federal laws and regulations pertaining to hazards and hazardous materials are discussed in this section.

a. Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, commonly known as Superfund, was established by the US Congress to address environmental health damaged caused by hazardous waste disposal sites. The purpose of CERCLA is to identify and clean up chemically contaminated sites that pose a significant threat to environmental health. CERCLA uses a hazard ranking system to determine whether a site should be placed on the National Priorities List for investigation and cleanup. CERCLA also established a trust fund, called Superfund, for site cleanup when no responsible party can be identified. CERCLA is administered by the US Environmental Protection Agency (EPA).

b. Superfund Amendments and Reauthorization Act

The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA on October 17, 1986. SARA reflected the US EPA's experience in administering the complex Superfund

program during its first six years and made several important changes and additions to the program. Specifically, SARA:

- Stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites.
- Required Superfund actions to consider the standards and requirements found in other State and federal environmental laws and regulations.
- Provided new enforcement authorities and settlement tools.
- Increased State involvement in every phase of the Superfund program.
- Increased the focus on human health problems posed by hazardous waste sites.
- Encouraged greater citizen participation in making decisions on how sites should be cleaned up.
- Increased the size of the trust fund to $8.5 Billion.

The Superfund Amendments and Reauthorization Act also required the US EPA to revise the Hazard Ranking System to ensure that it accurately assessed the relative degree of risk to human health and the environment posed by uncontrolled hazardous waste sites that may be placed on the National Priorities List.

c. Hazardous Materials Transportation Act

The Hazardous Material Transportation Act was enacted in 1975. Its primary objective is to provide adequate protection against the risks to life and property inherent in the transportation of hazardous materials in commerce by improving the regulatory and enforcement authority of the Secretary of Transportation. A hazardous material, as defined by the Secretary of Transportation is, any "particular quantity or form" of a material that "may pose an unreasonable risk to health and safety or property."

d. Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) of 1976 gives the US EPA the authority to control hazardous waste from the "cradle to grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid waste. The 1986 amendments to RCRA enabled the US EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

The federal Hazardous and Solid Waste Amendments are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as cor-

rective action for releases. Some of the other mandates of this law include increased enforcement authority for the US EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.

e. National Emissions Standards for Hazardous Air Pollutants

National Emissions Standards for Hazardous Air Pollutants guidelines require the removal of potentially friable asbestos containing building materials (ACBMs) prior to building demolition or renovation that may disturb the ACBM.

f. Other Federal Agencies

Other federal agencies that regulate hazardous materials include the Occupational Safety and Health Administration (OSHA), which addresses hazardous substances in the workplace, and the National Institute of Health, which conducts and supports research on the biological effects of, as well as identifies and defines, hazardous substances. In addition, the Department of Transportation houses the Pipeline and Hazardous Materials Safety Administration, which administers rules and regulations pertaining to the transport of hazardous materials. The following federal laws and guidelines also govern hazardous materials:

- ♦ Occupational Safety and Health Act of 1970
- ♦ Federal Insecticide, Fungicide, and Rodenticide Act of 1947
- ♦ Guidelines for Carcinogens and Biohazards
- ♦ Toxic Substances Control Act of 1976
- ♦ Federal Hazardous Materials Transportation Law of 1975

**2. State Agencies and Regulations**

This section discusses State agencies and regulations that pertain to hazards and hazardous wastes.

a. California Environmental Protection Agency

The management of hazardous materials and waste within California is under the jurisdiction of the California EPA. The California EPA provides a cabinet level voice for the protection of human health and the environment, and ensures the coordinated deployment of State resources.

The State of California Office of Environmental Health Hazard Assessment oversees implementation of many public health-related environmental regulatory programs within the California EPA, including implementing the provisions of the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Proposition 65 requires the Governor to publish, at least annually, a list of chemicals known to the State to cause cancer or reproductive toxicity. Proposition 65 was intended by its authors to protect California citizens and the State's drinking

water sources from chemicals known to cause cancer, birth defects, or other reproductive harm and to inform citizens about exposures to such chemicals.

b. The California Department of Toxic Substances Control

Within the California EPA, the California Department of Toxic Substances Control (DTSC) has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the State agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law. Since August 1, 1992, the DTSC has been authorized to implement the State's hazardous waste management program for the California EPA.

c. The California Department of Transportation

The California Department of Transportation (Caltrans) manages more than 50,000 miles of California's highway and freeway lanes, provides inter-city rail services, permits more than 400 public-use airports and special-use hospital heliports and works with local agencies on transportation issues. Caltrans is also the first-responder for hazardous material spills and releases that occur on those highway and freeway lanes and inter-city rail services.

d. State Water Resources Control Board

The Central Valley Regional Water Quality Control Board (RWQCB) is authorized by the State Water Resources Control Board to enforce provisions of the Porter-Cologne Water Quality Control Act of 1969. This act gives the Central Valley RWQCB authority to require groundwater investigations when the quality of groundwater or surface waters of the State are threatened, and to require remediation of the site, if necessary.

e. State of California Multi-Hazard Mitigation Plan

The State of California Multi-Hazard Mitigation Plan (SHMP) is the official statement of the State's hazard identification, vulnerability analysis, and hazard mitigation strategy. The SHMP is also a federal requirement under the Disaster Mitigation Act of 2000 for the State of California to receive federal funds for disaster assistance grant programs.[1] The goal of the SHMP, prepared by the Office of Emergency Services (OES), is to guide implementation activities to achieve the greatest reduction of vulnerability, which results in saved lives, reduced injuries, reduced property damages, and protection for the environment.

[1] State of California Governor's Office of Emergency Services website. http://hazardmitigation.oes.ca.gov/plan/state_multi-hazard_mitigation_plan_shmp, accessed on June 24, 2012.

f. California Fire Safety Regulations

There are number of State regulations pertaining to wildfire hazards, including the following:

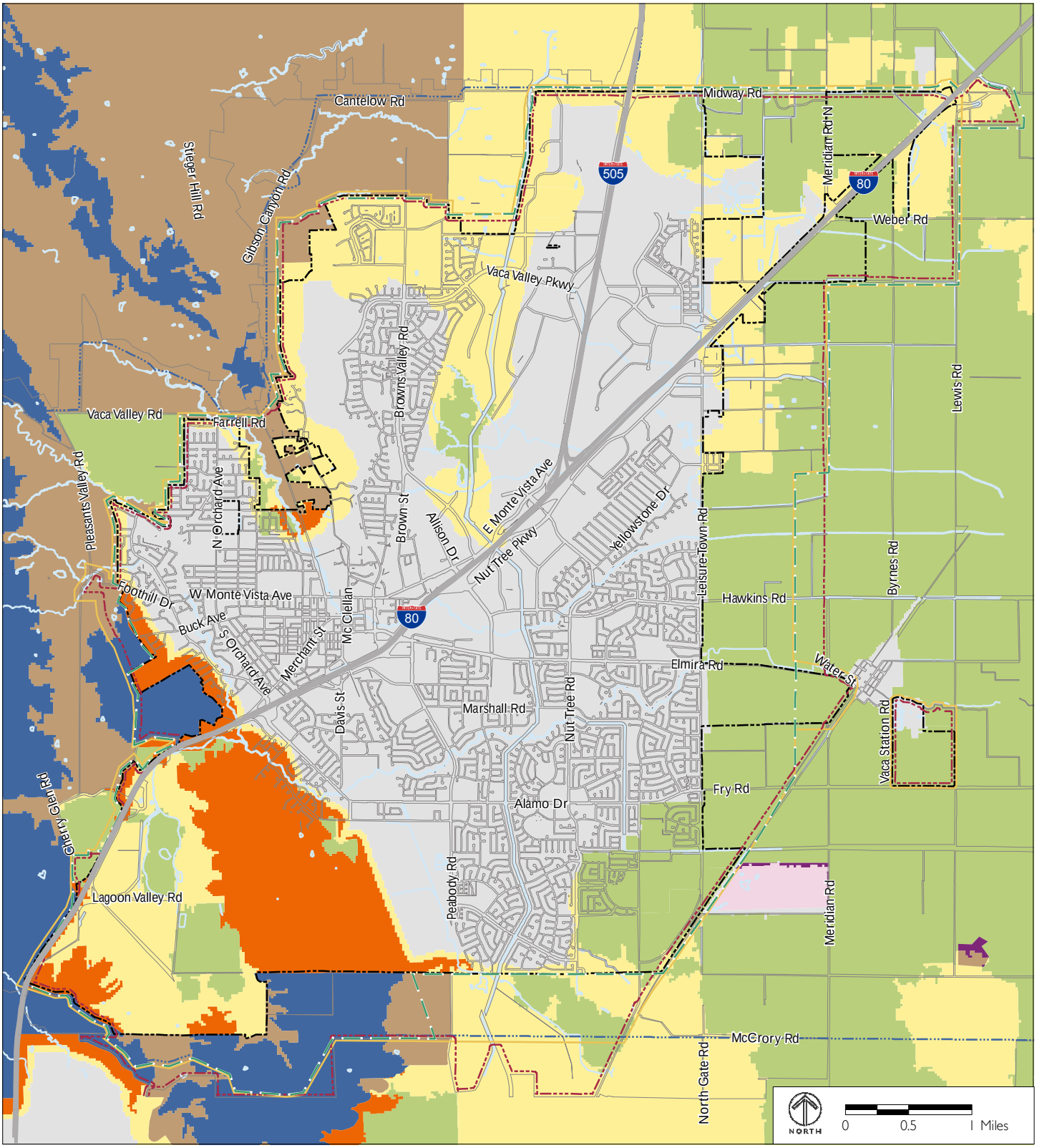
**Public Resources Code Fire Safe Regulations.** Section 4290 of the Public Resources Code covers Fire Safe Regulations, establishing minimum road standards; signing for streets, roads and buildings; private water supply resources; and wildland fuel modification. Section 4290 works in conjunction with building construction development standards in State Responsibility Areas (SRAs), which are State-identified lands or areas for which the California Department of Forestry and Fire Protection (CAL FIRE) has the primary responsibility to manage the public safety during a fire incident. SRAs are defined based on land ownership, population density, and land use. As shown in Figure 4.8-1, SRAs in the EIR Study Area only occur outside of the city limits in the Gibson Canyon area, the area west of Alamo Drive and north of Interstate 80, and an area south of the city limits. In addition, Section 4291 of the PRC requires annular defensible space of 100 feet to be provided around all structures in or adjoining any mountainous area or land covered with forest, brush, grass, or other flammable material.

- **Wildland-Urban Interface Code.** The California Building Commission adopted the Wildland-Urban Interface Codes in late 2005 with an effective date of January 2008. These codes include provisions for ignition-resistant construction standards in fire prone areas. More specifically, new buildings located in any fire hazard severity zone within SRAs, any locally-designated Very High Fire Hazard Severity Zone (VHFHSZ), or any Wildland-Urban Interface Fire Area must meet the requirements in the new codes. The updated fire hazard severity zones are used by building officials to determine appropriate construction materials for new buildings in the wildland-urban interface. These zones are also used by property owners to comply with natural hazards disclosure requirements at the time of property sale. The EIR Study Area contains Moderate and High Fire Hazard Severity Zones, but does not contain any VHFHSZs.

- **California Fire Code.** This is the official Code for the State and all political subdivisions. It is located in Part 9 of Title 24 of the California Code of Regulations (Title 24 is commonly referred to as the California Building Standards Code). The California Fire Code is revised and published every three years by the California Building Standards Commission. It was most recently published in 2010.

  **California Health and Safety Code.** This Code regulates the abatement of fire-related hazards. It also requires that local jurisdictions enforce the Uniform Building Code, which provides standards for fire-resistive building and roofing materials, and other fire-related construction methods.

- **California Code of Regulations.** Title 19 of this Code establishes regulations related to fire prevention and engineering measures for new construction.




Source: CAL FIRE, 2007; The Planning Center | DC&E, 2012.

- City Limits
- Study Area
- Urban Growth Boundary
- Planned Sphere of Influence
- Planning Area
- LRA, High
- LRA, Moderate
- LRA, Non-Wildland/Non-Urban
- LRA, Urban Unzoned
- SRA, High
- SRA, Moderate
- SRA, Non-Wildland/Non-Urban
- SRA, Urban Unzoned

FIGURE 4.8-1

**FIRE HAZARD SEVERITY ZONES IN THE LOCAL RESPONSIBILITY AREA (LRA) AND STATE RESPONSIBILITY AREA (SRA)**

- **Assembly Bill 337 (Bates Bill).** In response to the Oakland Hills fire of 1991, this bill was passed in 1992. It requires brush clearance and fire resistant roof material (Class A, B, or C) to be used on all new construction that is located in any fire hazard severity zone.

### 3. County Regulations and Plans

This section describes County regulations and plans pertaining to hazards and hazardous materials.

a. Solano County Department of Resource Management

The Solano County Department of Resource Management is the Certified Unified Program Agency for Solano County, including all of its cities. As the Certified Unified Program Agency, the Department of Resource Management administers the following Unified Programs:

- Hazardous Materials Release Response Plans and Inventory (Business Plan) Program
- California Accidental Release Prevention Program
- Underground Storage Tank Program
- Hazardous Waste Generator and Hazardous Waste On-Site Treatment Programs
- Above Ground Storage Tank Program (Spill Prevention, Control and Countermeasure Plans)

b. Solano County Hazardous Materials Programs

The County has established hazardous material site mitigation through the Local Oversight and Spills, Leaks, Investigations, and Cleanup programs to ensure that cleanup meets State standards. Additionally, the County has a Waste Tire Enforcement program to monitor waste tire generation and disposal facilities.

c. Solano County Multi-Hazard Mitigation Plan

Solano County adopted its initial Multi-Hazard Mitigation Plan Annex in May 2006 as a participating jurisdiction in the Association of Bay Area Governments' Multi-Jurisdictional Local Government Hazard Mitigation Plan. The federal Disaster Management Act of 2000 requires local agencies to develop Local Hazard Mitigation Plans in order to qualify for grant funding for hazard mitigations. To maintain eligibility for funding, the plans are updated on a five-year cycle of monitoring, evaluating, and updating. An updated Solano County Multi-Hazard Mitigation Plan was completed in March 2012 and submitted to Federal Emergency Management Agency (FEMA) and California Emergency Management Agency (CalEMA) for review. The Solano County Multi-Hazard Mitigation Plan identifies the location and geographic extent of vulnerability to man-made and natural hazards, including floods, fire, and earthquakes, in Solano County. The

plan lists and prioritizes hazard mitigations, which are actions that reduce the severity or intensity of risk from potential disasters and allow for quicker recovery from disaster.

d. Solano County Airport Land Use Commission

The Solano County Airport Land Use Commission (ALUC) guides airport development in the county and governs the area surrounding airports to prevent issues relating to noise and safety. Additionally, the ALUC prepares Airport Land Use Compatibility Plans (ALUCPs) and ensures that cities within Solano County have policies and regulations in compliance with ALUCP provisions.

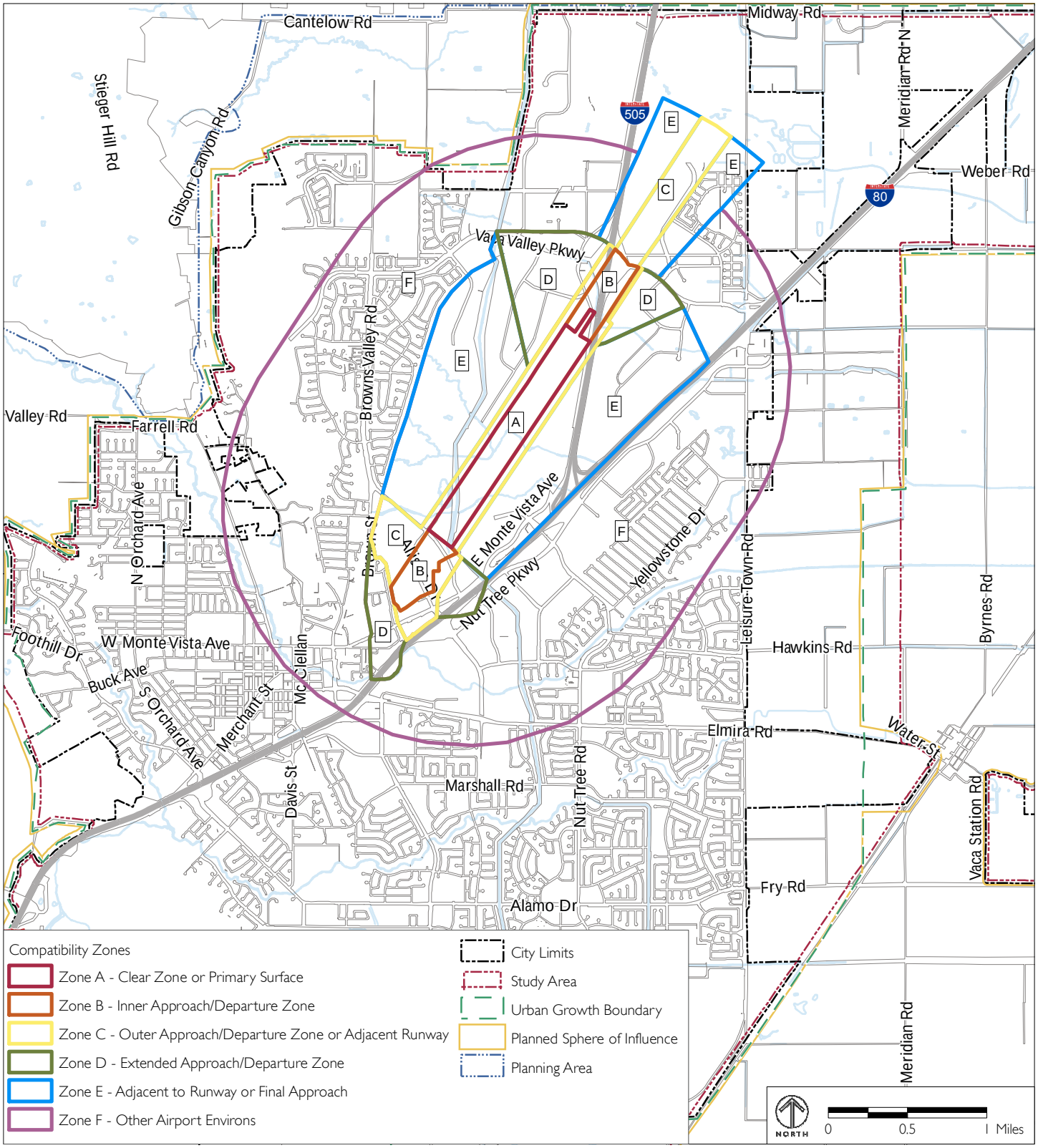
As shown in Figure 4.8-2, all Compatibility Zones (A, B, C, D, E, and F) of the 1988 Nut Tree ALUCP are within the EIR Study Area. Zone A prohibits residential uses, and Zones B, C, D, and E limit allowable residential densities. Zones A, B, C, D, and E limit the maximum allowable number of persons per acre in and out of structures. Zone F limits assemblages under flight tracks as follows: captive groups should not exceed 100-person structures; and large assemblages should not exceed 300 persons grouped in close proximity (e.g., in theaters, auditoriums, conference facilities, etc.).[2] Solano County is currently preparing an update to the Nut Tree Airport Master Plan.

The EIR Study Area falls within Compatibility Zones C and D of the Travis Air Force Base LUCP, as well as within the Height Review Overlay Zone. Within Zone C, developed residential areas within existing city limits are excluded from the regulations and maximum allowable building heights and allowed densities of persons per acre inside and outside of structures are specified. Zone D prescribes limitations on the height of structures. The Height Review Overlay zone covers locations where the terrain exceeds or comes within 35 feet of any of the Federal Aviation Regulation Part 77 airspace protection surfaces for Travis Air Force Base.[3] Federal Aviation Regulation Part 77 sets forth standards and notification requirements for objects affecting navigable airspace.[4]

[2] Solano County, 2010, *Nut Tree Airport Master Plan Working Paper One*, page B.22.

[3] Solano County, 2002, *Travis Air Force Base Land Use Compatibility Plan*, pages 2-3 and 2-6.

[4] U.S. Department of Transportation, Federal Aviation Administration, http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=0fd170cc66d6681a508f8279825828f6&rgn=div5&view=text&node=14:2.0.1.2.9&idno=14#14:2.0.1.2.9.1.1.1, accessed on April 24, 2012.




Source: City of Vacaville, 2012.

FIGURE 4.8-2
**NUT TREE AIRPORT LAND USE COMPATIBILITY ZONES**

## 4. Local Regulations and Plans

This section discusses local regulations and plans pertaining to hazards and safety in Vacaville.

### a. Vacaville Municipal Code

The City of Vacaville's Municipal Code addresses a variety of hazards and related topics, including hazardous materials and waste, emergency preparedness, airport safety, and wildfires.

#### *i. Hazardous Materials*

Section 14.09.127.080 of the Land Use and Development Code prohibits the release or emission of hazardous materials in excess of State or federally permitted levels, and requires hazardous material handling, use, transport, and storage to comply with Title 15, the Buildings and Construction portion of the Municipal Code. Chapter 14.20 establishes where storage of particular hazardous materials is prohibited. Additionally, Health and Safety (Title 8) of the Municipal Code regulates the burning and burying of hazardous waste.

#### *ii. Emergency Response and Wildland Fires*

Emergency organization, emergency functions, and an emergency response plan are codified in Chapter 2.52 of the Municipal Code. Chapter 14.09 provides supplemental standards and zoning provisions relating to airports and safety in the vicinity of airports. Section 14.20.290, Development Standards for New Construction Adjacent to Open Space Lands Where Wildfire is a Threat, provides development standards that apply to new construction adjacent to open space where there is threat of wildfire. The stated purpose of Section 14.20.290 is to increase the protection of life and property from wildfire occurring on open lands. The standards in Section 14.20.290 are summarized below:

- Section 14.20.290.020 requires that when development occurs on or adjacent to hillsides, the development must adhere to the City of Vacaville Fire Department Policy addressing hillside development. Where this policy is inconsistent with the requirements in Section 14.20.290, the Fire Chief shall have discretion to state the requirements for a project.
- Section 14.20.290.040 requires a fire buffer zone consisting of 50 feet of non-combustible defensible space between residential yards adjacent to open lands where wildfire is a threat.[5]
- Section 14.20.290.050 requires a 20-foot-wide fire access road, when required by the Fire Chief, around the perimeter of a site where wildfire is a threat, and Section 14.20.290.060 requires a greenbelt of fire resistive, irrigated low-growth vegetation, when required by the

[5] It should be noted that this requirement may be superseded by Section 4291 of the California Public Resources Code Fire Safe Regulations, which requires annular defensible space of 100 feet to be provided around all structures in or adjoining any mountainous area or land covered with forest, brush, grass, or other flammable material.

Fire Chief. Section 14.20.290.070 states that a non-combustible fire break may be used in areas where it is not practical to apply a fire access road or greenbelt.

- Section 14.20.290.080 states that on streets directly adjacent to permanent open lands where wildfire is a threat, housing shall only be located on the side of the street opposite from the open space lands.
- Section 14.20.290.100 requires that all fencing adjacent to open space lands be of non-combustible material.
- Sections 14.20.290.110 and 14.20.290.120 establish rear and side setback requirements.
- Section 14.20.290.130 requires a residential sprinkler system, when requested by the Fire Chief, where the distance from a building to a public water supply is beyond the minimum required distance, ingress and egress for fire protection is sub-standard, or where needed to minimize the chance of a larger fire.
- Section 14.20.290.140 establishes ingress and egress requirements for all structures and improvements.
- Section 14.20.290.150 requires that the on-site water supply comply with the City Water Master Plan.
- Section 14.20.290.160 establishes residential construction standards for roofing materials, siding materials, eaves, attic and underfloor openings, and Section 14.20.290.170 establishes standards for accessory structures, such as decks, awnings, sheds, and porches.

*iii. Airport Safety*

Section 14.09.134 of the Land Use and Development Code addresses airport compatibility. Under Section 14.09.134.020, development within the Nut Tree Airport and Travis Air Force Base Land Use Compatibility Zones must comply with standards in the Nut Tree Airport Master Plan and Travis Air Force Base ALUCP, respectively.

b. Emergency Operations Plan

In 2006, the City of Vacaville adopted the Association of Bay Area Governments' *Taming Natural Disasters* report as its official Local Hazard Mitigation Plan.[6] The Local Hazard Mitigation Plan offers methods to mitigate natural hazards and enhance disaster resistance.[7] The Plan focuses on natural disasters, including earthquake hazards (surface faulting, ground shaking, liquefaction,

[6] Vacaville City Council, *Resolution 2006-94*, August 2006, available at http://www.abag.ca.gov/bayarea/eqmaps/mitigation/Vacaville-Resolution.pdf, accessed on January 9, 2012.

[7] ABAG, 2010, *Taming Natural Disasters*, page vii.

landslides, and tsunamis), and weather-related hazards (flooding, landslides, wildfires, drought, and climate change).[8]

## *B. Existing Conditions*

This section discusses the existing conditions pertaining to hazards and safety in Vacaville.

### 1. Hazardous Materials

The term "hazardous material" is defined in different ways for different regulatory programs. In this EIR, the California Health and Safety Code Section 25501 definition of a hazardous material is used, which is: "any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment."

Once a hazardous material is released, it moves from the source to a point of contact with the community or environment through an exposure pathway. To reach that point of contact, the exposure pathway must have:

- A contamination source or point of release.
- A transport mechanism from the source to the air, surface water, groundwater, or soil.
- A contact point where people are exposed to contaminated air, surface water, groundwater or soil.
- A route of entry into the body. Routes of entry include ingestion (eating or drinking), inhalation (breathing), and absorption (skin contact).

If any of the above requirements for an exposure pathway are not present, the pathway is incomplete and no exposure or risk is possible. In some cases, although a pathway is complete, the likelihood that exposure will occur is very small.

Leaking underground fuel tanks (LUFTs) are a common source of soil and groundwater contamination. A wide variety of industries have historically used underground storage tanks for gasoline, diesel, waste oils, solvents, and other chemicals. Prior to regulation in the 1980s, these underground tanks were typically not monitored or provided with secondary containment. If a tank leaked, the contents could migrate to the soil and groundwater.

[8] ABAG, 2010, *Taming Natural Disasters*, page 1.

Underground storage tanks (USTs) without regulatory permits may be present at sites where use of the tank was discontinued before monitoring requirements were implemented in the 1980s. These unpermitted tanks may have released chemicals that have previously gone undetected. These sites are potential sources of hazardous substances because accidental releases or incidental leakage or spillage may have gone undetected in the past.

The Department of Toxic Substances Control (DTSC) has identified sites in or adjacent to the EIR Study Area that have been known to contain hazardous materials storage tanks. Table 4.8-1 lists the sites along with their current status of remediation. Seven sites are included in the list under the Spills, Leaks, Investigation, and Cleanups (SLIC) Program, which investigates and regulates non-permitted discharges. Two sites are listed as Voluntary Cleanup Sites, which are overseen by the Statewide Cleanup Operation Division. The list also includes one School Cleanup Site, and seven School Investigation Sites, which are overseen by the Schools Division. The EIR Study Area includes one operating Permitted Site (the DK Dixon site, permitted for tank storage), and one Tiered Permit site (the Court Galvanizing site, which is currently inactive and in deed of evaluation subject to California's tiered permitting system for hazardous waste handling). As shown in Table 4.8-1, there are numerous Leaking Underground Fuel Tanks (LUFTs) that are scattered throughout the EIR Study Area. There are no federal Superfund sites or State Response sites identified in the EIR Study Area as being evaluated by the DTSC.

**2. Wildland Fire Risk Areas**

CAL FIRE describes "wildland-urban interface" as the condition where highly flammable native vegetation meets high-value structures, such as homes. In most cases, there is not a clearly defined boundary or interface between the structures and vegetation that present the hazard. Historically, homes in these ill-defined wildland-urban intermix boundary areas were particularly vulnerable to wildfires because they were built with a reliance on fire department response for protection rather than fire resistance, survivability, and self-protection. However, in the recent past, there has developed a greater appreciation for the need to regulate development in these hazardous areas as a result of a number of serious wildland fire conflagrations throughout the state.

The severity of the wildfire hazard is determined by the relationship between three factors: fuel classification, topography, and critical fire weather frequency. CAL FIRE defines Fire Hazard Severity Zones for areas within the state; fire hazard is defined as a "measure of the likelihood of an area burning and how it burns," with a zone being an area characterized by a particular level of fire hazard. CAL FIRE Fire Hazard Severity Zone maps indicate areas for which the Board of Forestry has determined that the State of California has fiscal responsibility for wildland fire protection services as the State Responsibility Area (SRA), and areas for which local jurisdictions have fiscal responsibility as the Local Responsibility Area (LRA).

## TABLE 4.8-1 HAZARDOUS MATERIALS CLEANUP SITES IN THE EIR STUDY AREA

| Site Name | Address | Type | Cleanup Status |
|---|---|---|---|
| 1119 East Monte Vista Avenue | 1119 East Monte Vista Avenue, Vacaville | LUFT | Completed – Case Closed |
| 7-11 Store #2211-24248 | 1091-1097 East Monte Vista Avenue, Vacaville | LUFT | Open – Remediation |
| 7-11 Store #22837 | 2490 Nut Tree Road, Vacaville | LUFT | Completed – Case Closed |
| Arco #2067 | 310 Orange Drive, Vacaville | LUFT | Open – Verification Monitoring |
| Arco #5368 | 2500 Nut Tree Parkway, Vacaville | LUFT | Completed – Case Closed |
| Arco #5368 | 2500 Nut Tree Road, Vacaville | LUFT | Completed – Case Closed |
| Arco #5630 | 1470 Alamo Drive, Vacaville | LUFT | Completed – Case Closed |
| Basic American Foods | 411 Davis Street, Vacaville | LUFT | Completed – Case Closed |
| Basic Vegetable Products | 619 Davis Street, Vacaville | SLIC | Open – Inactive |
| Basic Vegetable Products Site | 411 Davis Street, Vacaville | Voluntary Cleanup | Certified |
| BC Stocking Distribution | 7300 Chevron Way, Dixon | SLIC | Open – Inactive |
| Beacon SS #522 | 800 Merchant Street, Vacaville | LUFT | Completed – Case Closed |
| Beacon SS #699 | 921 Merchant Street, Vacaville | LUFT | Completed – Case Closed |
| Beacon, Nut Tree | 1501 East Monte Vista Avenue, Vacaville | LUFT | Open – Remediation |
| BP #11244 | 817 Leisure Town Road, Vacaville | LUFT | Open – Remediation |
| California Medical Facility | 1600 California, Vacaville | LUFT | Open – Assessment and Interim Remedial Action |
| California Medical Facility | 1600 California, Vacaville | SLIC | Completed – Case Closed |
| Chandler's Home Appliance | 218 Dobbins Street, Vacaville | LUFT | Completed – Case Closed |
| Chevrolet Dealership (Former) | 1250 East Monte Vista Avenue, Vacaville | LUFT | Completed – Case Closed |
| Chevron | 1615 East Monte Vista Avenue, Vacaville | LUFT | Open – Site Assessment |

## TABLE 4.8-1 HAZARDOUS MATERIALS CLEANUP SITES IN THE EIR STUDY AREA

| Site Name | Address | Type | Cleanup Status |
|---|---|---|---|
| Chevron #9-1668 | 501 Peabody Road, Vacaville | LUFT | Completed – Case Closed |
| Chevron #9-2610 | 200 East Monte Vista Avenue, Vacaville | LUFT | Completed – Case Closed |
| Chevron #9-5959 | 300 Orange Drive, Vacaville | LUFT | Completed – Case Closed |
| Chevron #9-6738 | 970 Merchant Street, Vacaville | LUFT | Completed – Case Closed |
| Chevron (Abandoned Shell) | 299 Orange Drive, Vacaville | LUFT | Completed – Case Closed |
| Court Galvanizing, Inc. | 4937 Allison Parkway, Vacaville | Tiered Permit | Inactive – Needs Evaluation |
| Darpetro | 401 Merchant Street, Vacaville | LUFT | Open – Verification Monitoring |
| Darpetro #4 (Exxon) | 199 Orchard Street, Vacaville | LUFT | Completed – Case Closed |
| Darpetro (Morre's SS) | 937 East Monte Vista Avenue, Vacaville | LUFT | Completed – Case Closed |
| Dependable Sheet Metal | 1330 Callen Street, Vacaville | LUFT | Completed – Case Closed |
| Dick Lewis Ford | 148 Peabody Road, Vacaville | LUFT | Completed – Case Closed |
| DK Dixon | 7300 Chevron Way, Dixon | Permitted Site – Operating | Standardized |
| Easterly Waste Water Treat Plant | 6040 Vaca Station Road, Elmira | LUFT | Completed – Case Closed |
| Elementary School 2CD | 6975 Browns Valley Road, Vacaville | | Certified |
| Eric's Cable Car Wash | 977 Merchant Street, Vacaville | LUFT | Completed – Case Closed |
| Fairmont School Site | 1355 Marshall Road, Vacaville | School Investigation | Inactive - Needs Evaluation |
| Firestone Store #3680 | 1200 East Monte Vista Avenue, Vacaville | LUFT | Completed – Case Closed |
| First Northern Bank | 1250 East Monte Vista Avenue, Vacaville | SLIC | Open – Inactive |
| Flying J | 177 Peabody Road, Vacaville | LUFT | Open – Verification Monitoring |
| Food & Liquor #38 | 1193 East Monte Vista Avenue, Vacaville | | Open – Verification Monitoring |

## TABLE 4.8-1 HAZARDOUS MATERIALS CLEANUP SITES IN THE EIR STUDY AREA

| Site Name | Address | Type | Cleanup Status |
|---|---|---|---|
| High School B | Leisure Town Road/Elmira Road, Vacaville | School Investigation | No Further Action |
| Kmart | 130 Browns Valley Parkway, Vacaville | LUFT | Completed – Case Closed |
| Kabota's (Vaughn Used Cars) | 270 Nut Tree Parkway, Vacaville | LUFT | Completed – Case Closed |
| Kelly Company | 1076 East Monte Vista Avenue, Vacaville | LUFT | Completed – Case Closed |
| Ken's Tires (Former) | 650 Davis Street, Vacaville | LUFT | Completed – Case Closed |
| KMEP Fry/ Meridian Road Railroad Crossing | 1500 Feet West of Fry Road, Vacaville | SLIC | Completed – Case Closed |
| Maintenance Department (Vacaville USD) Case #1 | 353 Brown Street, Vacaville | LUFT | Completed – Case Closed |
| Mason Plaza | 900 Mason Street, Vacaville | LUFT | Completed – Case Closed |
| New Elementary School #1 | West of Leisure Town Road/South of Midway Road, Vacaville | School Investigation | Active |
| North Village Elementary | Vaca Valley Parkway/Leisure Town Road, Vacaville | School Investigation | No Action Required |
| Papin Property School Site | 5591 Vanden Road, Solano County | School Investigation | No Action Required |
| PG&E Vacaville Service Center | 158 Peabody Road, Vacaville | LUFT | Completed – Case Closed |
| Private Residence | Address Unknown, Vacaville | LUFT | Completed – Case Closed |
| Private Residence | Address Unknown, Vacaville | LUFT | Completed – Case Closed |
| Private Residence | Address Unknown, Vacaville | LUFT | Completed – Case Closed |
| Private Residence | Address Unknown, Vacaville | SLIC | Completed – Case Closed |
| Proposed New Science Building, Will C. Wood High School | 998 Marshall Road, Vacaville | School Investigation | No Action Required |
| Quik Stop Market #102 | 807-A Davis Street, Vacaville | LUFT | Completed – Case Closed |
| Red Carpet Car Wash | 108 Elmira Road, Vacaville | LUFT | Completed – Case Closed |
| Shell | 1611 East Monte Vista Avenue, Vacaville | LUFT | Completed – Case Closed |

## TABLE 4.8-1 HAZARDOUS MATERIALS CLEANUP SITES IN THE EIR STUDY AREA

| Site Name | Address | Type | Cleanup Status |
|---|---|---|---|
| Shell | 101 Peabody Road, Vacaville | LUFT | Completed – Case Closed |
| Shell Case #2 | 1611 East Monte Vista Avenue, Vacaville | LUFT | Open – Verification Monitoring |
| Shell SS | 950 Merchant Street, Vacaville | LUFT | Completed – Case Closed |
| Solano Irrigation District Garage | 508 Elmira Road, Vacaville | LUFT | Open – Assessment and Interim Remedial Action |
| Texaco (Former) | 190 Hickory Lane, Vacaville | LUFT | Completed – Case Closed |
| The Goodyear Tire & Rubber Company | 1146 East Monte Vista Avenue, Vacaville | LUFT | Open – Verification Monitoring |
| Thrifty (BP) | 1491 East Monte Vista Avenue, Vacaville | LUFT | Completed – Case Closed |
| Town Square, Vacaville | 501 Main Street, Vacaville | LUFT | Open – Verification Monitoring |
| Union Pacific (Former SPRR) | Mason & Depot Street, Vacaville | LUFT | Completed – Case Closed |
| Unocal #4882 | 390 East Monte Vista Avenue, Vacaville | LUFT | Completed – Case Closed |
| Unocal #5264 | 167 Bella Vista Road, Vacaville | LUFT | Completed – Case Closed |
| Vacaville (Former Tesoro #67114) | 800 Merchant Street, Vacaville | LUFT | Completed – Case Closed |
| Vacaville Cardlock | 536 Merchant Street, Vacaville | LUFT | Completed – Case Closed |
| Vacaville City | 630 Merchant Street, Vacaville | LUFT | Completed – Case Closed |
| Vacaville Clean Loan | 700-702 East Main Street & 701 Catherine Street, Vacaville | Voluntary Cleanup | Certified |
| Vacaville Fruit Company | 855 Davis Street, Vacaville | LUFT | Completed – Case Closed |
| Vacaville Fruit Company | 855 Davis Street, Vacaville | SLIC | Open – Inactive |
| Vacaville Sanitary Service | 855-1/2 Davis Street, Vacaville | LUFT | Completed – Case Closed |
| Vacaville USD Yard Case #2 | 353 Brown Street, Vacaville | LUFT | Completed – Case Closed |
| Vanden High School Modernization Project | 2951 Markley Lane, Fairfield | School Investigation | No Action Required |

## TABLE 4.8-1 HAZARDOUS MATERIALS CLEANUP SITES IN THE EIR STUDY AREA

| Site Name | Address | Type | Cleanup Status |
|---|---|---|---|
| Vanden II | 5714 Vanden Road, Vacaville | LUFT | Open – Site Assessment |
| Zandick Property | 410 Kendal Street, Vacaville | LUFT | Open – Verification Monitoring |

Notes:
LUFT = Leaking Underground Fuel Tank
SLIC = Spills, Leaks, Investigation, and Cleanup
Source: California Department of Toxic Substances Control, EnviroStor Database, accessed on April 23, 2012.

SRAs include areas covered by forest or trees capable of producing forest products, and lands used for range or forage purposes. SRAs do not include lands owned by the federal government or lands within city boundaries.[9] The EIR Study Area contains areas within the LRA as well as areas within the SRA. As shown in Figure 4.8-1, Vacaville's Fire Hazard Severity Zones range from Moderate to High. These zones are primarily located in the southwest corner and along the northern boundary of the city in Vacaville's hillside areas. Of the 24,485 total acres in the EIR Study Area, approximately 2,635 acres are located in a High Fire Hazard Severity Zone and approximately 5,717 acres are located in a Moderate Fire Hazard Severity Zone.

### 3. Airports

The Nut Tree Airport is a public airport located in Vacaville near the Interstate 80/Interstate 505 interchange. Another airfield, Travis Air Force Base, is a federally owned airport located south of Vacaville, approximately 2 miles south of the EIR Study Area. The EIR Study Area includes Nut Tree Airport Land Use Compatibility Zones, and partially falls within Travis Air Force Base Compatibility Zones. In addition, the Study Area is subject to land use compatibility policies identified in the Nut Tree Airport Master Plan and Travis Air Force Base Land Use Compatibility Plan.[10,11]

## *C. Standards of Significance*

Implementation of the proposed General Plan and ECAS would have a significant impact related to hazards and safety if they would:

- ♦ Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- ♦ Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- ♦ Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- ♦ Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

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[9] State of California Resources Agency, State Responsibility Area Classification System, http://www.bof.fire.ca.gov/board_business/other_board_actions/state_responsibility_area_5y_rev_2005/sraclassificationsystem.pdf, accessed on August 30, 2012.

[10] Solano County, 2010, *Nut Tree Airport Master Plan Working Paper One*, page B.21.

[11] Solano County, 2002, *Travis Air Force Base Land Use Compatibility Plan*, page 2-17.

- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- If located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area.
- If within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.

## *D. Impact Discussion*

This section discusses potential impacts of the proposed General Plan on hazards and hazardous materials in the EIR Study Area. Implementation of the proposed ECAS would have minimal hazards and hazardous materials impacts and is discussed, where relevant, in the sections below.

### 1. Project Impacts

The discussion of potential project impacts is organized by and responds to each of the potential impacts identified in the Standards of Significance.

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

A number of companies that use, store, or dispose of hazardous materials currently operate in Vacaville. In addition, existing structures may contain hazardous building materials, such as asbestos and lead-based paint. Construction and operation of new development allowed by the proposed General Plan would involve the routine use and handling of hazardous materials (e.g. diesel gasoline and fertilizers), and could involve the use of petroleum-based fuels for maintenance and construction equipment, which would be transported within the city.

The Safety Element of the proposed General Plan includes a number of policies intended to reduce the risks associated with the transport, use, and disposal of hazardous materials:

- Policy SAF-P6.1 directs the City to work with Solano County and other agencies to inform consumers about the use and disposal of hazardous materials.
- Policy SAF-P6.2 directs the City to work with the County to implement the Hazardous Waste Implementation Plan.

- Policy SAF-P6.3 requires industrial uses that rely on the use of hazardous materials to have a program in place that addresses the acceptable use, storage, disposal, and emergency response for hazardous materials.
- Policy SAF-P6.6 promotes the safe transport of hazardous materials by directing the City to maintain designated hazardous materials carrier routes, prohibit vehicles carrying hazardous materials from parking on City streets, and require that new hazardous materials pipelines avoid residential areas and immobile populations.

New development would also be subject to existing regulations related to the transport, use, and disposal of hazardous materials. For example, through its Hazardous Waste Management Program, the DTSC works with the California EPA to enforce and implement regulations pertaining to hazardous wastes. In addition, the US EPA provides oversight and supervision for site investigations and remediation projects, and has developed land disposal restrictions and treatment standards for the disposal of certain hazardous wastes.

The proposed ECAS includes measures that address building and construction materials to ensure energy and water efficiency and solid waste reduction. New development that is subject to the ECAS and these measures would also be subject to the proposed General Plan policies and existing regulations that would mitigate potential impacts related to hazardous materials. In addition, the proposed ECAS includes a solid waste measure that directs the City to conduct outreach about proper disposal of potentially hazardous appliances (Measure SW-1C), reducing potential hazardous materials impacts.

With these proposed policies and existing regulations in place, development allowed by the proposed General Plan and subject to the proposed ECAS would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and therefore would be a *less-than-significant* impact.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Increased development within Vacaville could increase the frequency of accidents involving the release of hazardous materials. As established above, there are a number of businesses conducted in structures on properties that use, store, and dispose hazardous materials, and the construction and operation of new development allowed by the General Plan could involve the transport, use, and disposal of hazardous materials.

The Union Pacific rail line is located to the east of the EIR Study Area, and under the proposed General Plan new development could occur adjacent to the rail line. Both passenger trains and

freight trains use the rail line, and some hazardous materials are transported by the freight trains. Their transport is governed by the United States Department of Transportation's Pipeline and Hazardous Materials Safety Administration rules and regulations. Adherence to these existing rules and regulations would reduce potential risks associated with the proximity of development to the rail line.

The Safety Element of the proposed General Plan establishes a number of policies related to hazardous materials. As described above, under Policy SAF-P6.2, the City would work with the County to implement the Hazardous Waste Implementation Plan, and Policy SAF-P6.3 requires industrial uses that rely on the use of hazardous materials to have an emergency response program in place.

In addition, under the California Accidental Release Prevention Program, which Solano County implements as the local Certified Unified Program Agency, facilities that store highly hazardous materials are required to prepare a Risk Management Plan for responding to release incidents.

With implementation of proposed policies and the California Accidental Release Prevention Program, the impact would be *less than significant*.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Implementation of the proposed General Plan is not expected to result in significant land use changes in the vicinity of existing schools, with the exception of various proposed land uses in the vicinity of Solano Community College, including General Commercial, Business Park, and Residential High Density uses. To the east of Leisure Town Road, the proposed General Plan designates school sites that would be located in residential neighborhoods. No heavy industrial uses are proposed within a quarter mile of existing or proposed school sites.

Any new construction occurring in the vicinity of existing or future schools would be required to adhere to the previously described regulations enforced by federal, State, and local agencies, including the DTSC's Hazardous Waste Management Program and the California Accidental Release Prevention Program enforced by Solano County. In addition, as discussed above, the proposed General Plan includes policies that aim to reduce the risks associated with the transport, use, disposal, handling, and accidental release of hazardous materials. In addition to those policies, the proposed General Plan also includes Policy SAF-P6.4, which requires adequate separation between areas where hazardous materials are present and sensitive uses such as schools, residences, and public facilities, and Action SAF-A6.2, which directs the City to amend the Land Use and Development Code to specify development standards for properties where hazardous

materials are present, including adequate separation and buffers from sensitive uses such as schools, residences, and public facilities.

Furthermore, future development projects that involve the use of hazardous materials would be subject to project-level California Environmental Quality Act review, which would involve an analysis and disclosure of any impacts to nearby schools as a result of hazardous emissions or hazardous materials handling.

Because of the proposed General Plan policies and existing regulations described above, the impact to existing and future schools as a result of the proposed General Plan is *less than significant*.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

Sites within the EIR Study Area that are known to contain, or to have previously contained, hazardous materials are listed in Table 4.8-1. As shown in the table, the EIR Study Area contains sites under the SLIC Program, Voluntary Cleanup Sites, one School Cleanup Site, seven School Investigation Sites, one operating Permitted Site, one Tiered Permit site, and numerous sites containing LUFTs. The cleanup sites include sites listed on databases compiled pursuant to Government Code Section 65962.5. Most of these sites are listed as closed, indicating that they have been remediated to the satisfaction of the RWQCB based on the land use at the time of closure.

The proposed General Plan includes policies that would reduce the risks associated with hazardous materials sites. Policy SAF-P6.5 requires that, in areas historically used for commercial or industrial uses, developers conduct the necessary level of environmental investigation to ensure that soils, groundwater, and buildings affected by hazardous material releases from prior land uses and lead or asbestos present in building materials will not have a negative impact on the natural environment or health and safety of future property owners or users. In addition, Action SAF-A6.1 directs the City to continue to maintain and implement a hazardous materials information disclosure program.

As described above, the US EPA provides oversight and supervision for site investigations and remediation projects, and has developed land disposal restrictions and treatment standards for the disposal of certain hazardous wastes. US EPA oversight, combined with the implementation of the proposed General Plan, would result in a *less than significant* impact.

e. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

The proposed General Plan would have a significant environmental impact if it would locate people or structures in a High or Very High Fire Hazard Severity Zone, as defined by CAL FIRE. The EIR Study Area does not contain any Very High Fire Hazard Severity Zones but does contain High Fire Hazard Severity Zones and Moderate Severity Zones. Of the 24,485 total acres in the EIR Study Area, approximately 2,635 acres are located in a High Fire Hazard Severity Zone and approximately 5,717 acres are located in a Moderate Fire Hazard Severity Zone. As shown in Figure 4.8-1, the remaining acres, including the East of Leisure Town area, are classified as Non-Wildland/Non-Urban and Urban Unzoned.

Although portions of the EIR Study Area are designated as being subject to wildland fire hazards, the enforcement of proposed General Plan policies would prevent the exposure of people and structures to significant risks associated with wildland fires. The proposed General Plan contains several policies and programs to minimize risk imposed by wildland fires. Under Policy SAF-P5.1, development would be restricted in High and Very High Fire Hazard Severity Zones, and Policy SAF-P5.2 would require that all development in areas with a potential for wildland fire hazards include fire breaks adjoining open space areas, adequate access to adjoining open space, clearance around structures, fire-resistant ground cover and roofing materials, and adequate emergency water flow.

In addition, as described above in Section A.4.a.ii, State Fire Safety Regulations and Section 14.20.290 of the Land Use and Development Code provide development standards that apply to new construction adjacent to open space where there is threat of wildfire. The stated purpose of Section 14.20.290 is to increase the protection of life and property from wildfire occurring on open lands.

With the implementation of proposed General Plan policies and existing development requirements, new development would be sited away from areas with very high wildland fire risks, and development in areas with wildland fire risks would incorporate safety features to reduce risks. Therefore, impact would be *less than significant*.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The proposed General Plan would have a significant environmental impact if it would impact or physically interfere with an adopted emergency response plan or emergency evacuation plan, thereby putting the public or the environment at risk. As discussed in Section A.4.b, the City of Vacaville's emergency response plan is ABAG's *Taming Natural Disasters* report.

The proposed General Plan would prevent new development in the EIR Study Area from interfering with emergency response or evacuation plans. The policies under Goal SAF-7 of the proposed General Plan aim to reduce risks associated with emergencies and natural disasters. Under Policies SAF-P7.1 and SAF-P7.2, the City would promote public awareness and provide education to prepare for disasters and encourage preparedness at the individual, block, and neighborhood level. Under Policy SAF-P7.3, the City will review proposed developments for disaster response preparedness. Policy SAF-P7.4 requires that emergency access routes be kept free of traffic impediments, and Policy SAF-P7.5 directs the City to maintain comprehensive Emergency Response Plans. Lastly, under Policy SAF-P5.6, the Fire Department would review all development applications. Implementation of Policy SAF-P5.6 would provide a procedure through which the Fire Department can evaluate design for fire safety and emergency response on a case-by-case basis.

Through the implementation of the proposed General Plan policies listed above, the impact would be *less than significant*.

g. If located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area.

The Nut Tree Airport is a public airport located in Vacaville near the Interstate 80/Interstate 505 interchange. Another airfield, Travis Air Force Base, is a federally owned airport located south of Vacaville, approximately 2 miles south of the EIR Study Area.

The EIR Study Area includes Nut Tree Airport Land Use Compatibility Zones and partially falls within Travis Air Force Base Compatibility Zones. In addition, the Study Area is subject to land use regulations identified in the Nut Tree ALUCP and Travis Air Force Base LUCP. Under the new General Plan, new development located within the Airport Land Use Compatibility Zones would be subject to Section 14.09.134.020 of the Vacaville Land Use and Development Code, which requires that development within the Nut Tree Airport and Travis Air Force Base Land Use Compatibility Zones comply with standards in the Nut Tree ALUCP and Travis Air Force Base LUCP, respectively.

For a detailed analysis of the consistency of the proposed General Plan with the Nut Tree ALUCP and Travis Air Force Base LUCP, see Chapter 4.10, Land Use, of this EIR. While inconsistency with these airport LUCPs does not alone constitute a safety impact, they were developed in part to maintain public safety around airports, and can be used to determine potential safety impacts.

*i. Nut Tree Airport*

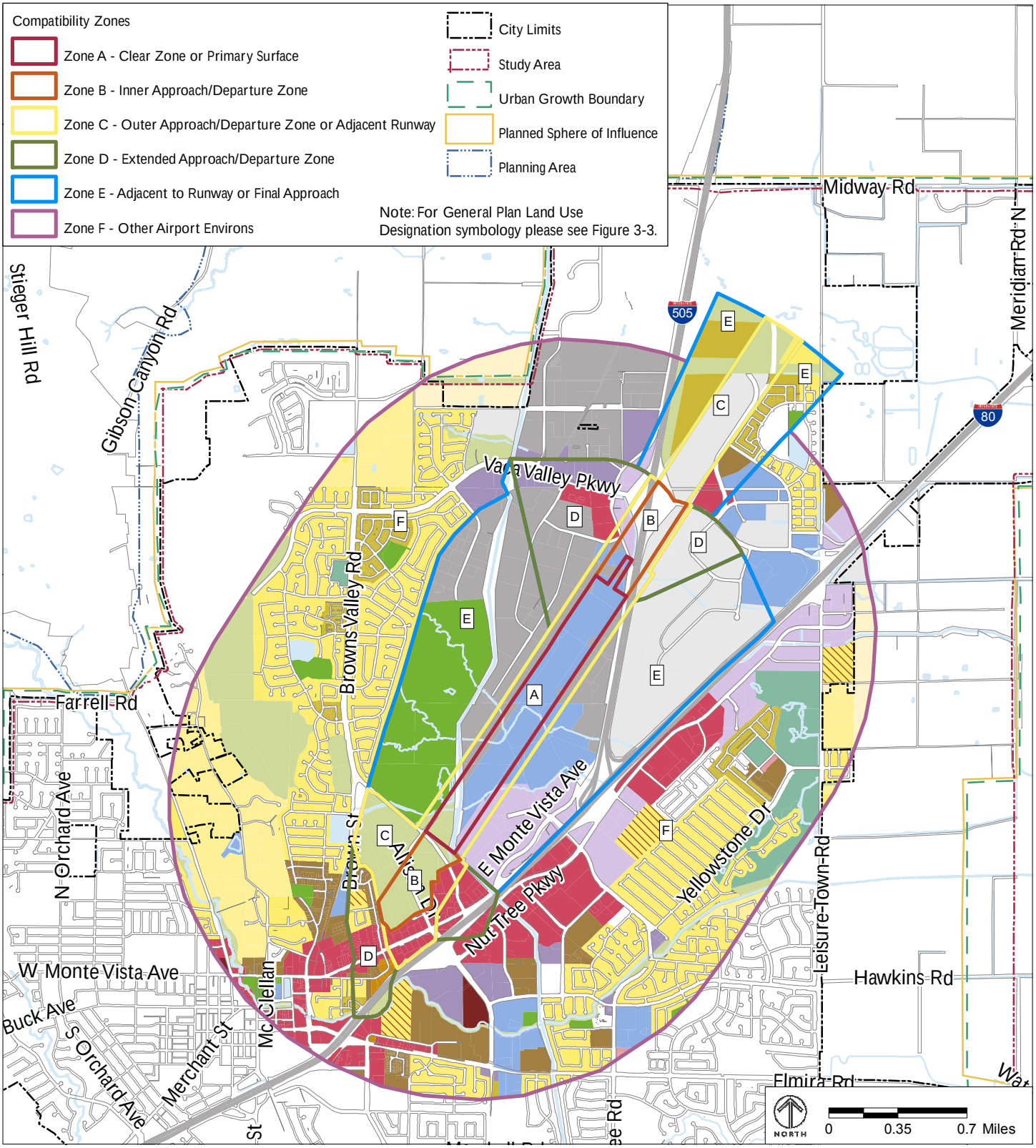
The EIR Study Area falls within Compatibility Zones A, B, C, D, E, and F of the Nut Tree ALUCP. According to the Nut Tree ALUCP, Zone A is a High Risk zone, Zone B is a Substantial Risk zone, Zones C and D are Moderate Risk zones, and Zones E and F are Limited Risk zones. Zone A prohibits residential uses, and Zones B, C, D, and E limit allowable residential densities. Zones A, B, C, D, and E also limit the maximum allowable number of persons per acre in and out of structures. Zone F limits assemblages under flight tracks as follows: captive groups should not exceed 100 persons in a structure; and large assemblages should not exceed 300 persons grouped in close proximity (e.g., in theaters, auditoriums, conference facilities, etc.).[12]

As shown in Figure 4.8-3, within Zone A, the proposed General Plan includes Industrial Park, Public/Institutional, and Public Open Space designations. Within Zone B, proposed land uses include Highway Commercial, Industrial Park, Public/Institutional, and Public Open Space uses. Within Zone C, proposed land uses include General Commercial, Industrial Park, and Public Open Space uses. Within Zone D, proposed land uses include Commercial Service, General Commercial, Highway Commercial, Industrial Park, Public/Institutional, and various residential land uses. Within Zone E, proposed land uses include General Commercial, Highway Commercial, Industrial Park, Public/Institutional, Public Parks, and various residential land uses. Proposed land uses that exceed residential density limits established by the ALUCP, or that involve densities of persons in excess of the thresholds established by the ALUCP, would be subject to ALUC consistency review. In addition, land use changes from the existing General Plan would require analysis and ALUC consistency review, including:

- The area proposed for General Commercial at East Monte Vista Avenue and Vaca Valley Parkway within Zone D is designated by the existing General Plan as Industrial Park.
- Airport-owned property within the Airport Business Park is proposed to change from a General Plan designation of Industrial to Public/Institutional.

In the North Village area, there is an area designated Residential High Density within Zone E, and in the Nut Tree Ranch area, there are some areas designated Residential High Density within Zone D. Since the Residential High Density land use designation allows 20.1 to 24.0 dwelling units per acre (du/ac), these uses would not be consistent with the maximum densities allowed by Zones D and E, which are 4 du/ac and 6 du/ac, respectively. However, these residential high density uses were approved prior to adoption of the proposed General Plan and were found by the Solano County Airport Land Use Commission (ALUC) to be consistent with the ALUCP.

[12] Solano County, 2010, *Nut Tree Airport Master Plan Working Paper One*, page B.22.




Source: City of Vacaville, 2012.

FIGURE 4.8-3

GENERAL PLAN LAND USE DESIGNATIONS IN THE NUT TREE AIRPORT LAND USE COMPATIBILITY ZONES

The North Village apartment site was found to be consistent with the ALUCP when the development was approved because Zone E standards allow "clustering" of residential densities. In the Nut Tree Ranch area, apartments were approved at a density 18 du/ac and were found by the Solano County ALUC to be consistent with the ALUCP because the approval "clustered" the allowable residential units and prohibited additional residential development in other Zone E parts of the Nut Tree Ranch. Therefore, development in these areas would not conflict with Zone D and Zone E requirements.

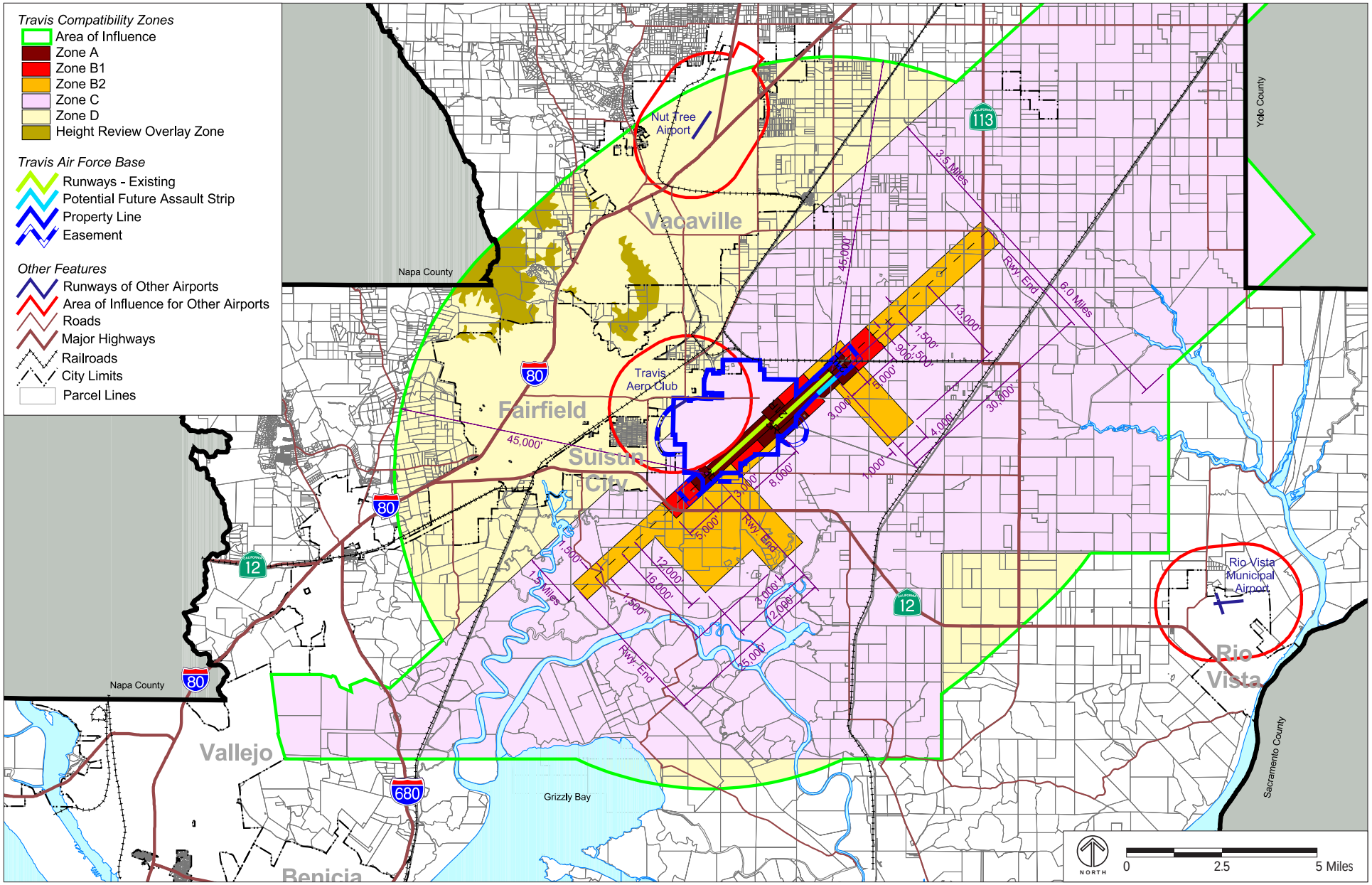
*ii. Travis Air Force Base*

The airport land use compatibility zones for Travis Air Force Base are shown in Figure 4.8-4. The EIR Study Area falls within Compatibility Zones C and D of the Travis Air Force Base LUCP, as well as within the Height Review Overlay Zone. Zone C includes areas exposed to low-altitude overflights. The Travis Air Force Base LUCP does not cite risk factors for Zone D or the Height Review Overlay zone. Within Zone C, building heights are subject to review and allowed densities of persons per acre inside and outside of structures are specified, but developed residential areas within existing city limits are excluded. The only portion of the EIR Study Area that falls within Zone C is the incorporated pocket located southeast of Elmira, which houses the Easterly Wastewater Treatment Plant. This area is designated for continued Public/Institutional uses, and therefore would not conflict with Zone C requirements.

*iii. Impact Significance Determination*

The proposed General Plan includes policies to maintain safe living and working conditions around the Nut Tree Airport and Travis Air Force Base. Specifically, Policy LU-25.2 limits residential development in areas impacted by potential hazards from the Nut Tree Airport to uses identified in the ALUCP, Policy LU-25.3 requires land uses in the vicinity of Nut Tree Airport or potentially affected by Travis Air Force Base to be compatible with airport operations and the ALUCPs for both airports, and Policy LU-25.5 directs the City to continue to refer development proposals within the Nut Tree Airport and Travis Air Force Base Compatibility Districts to the Solano County ALUC.

As described above, proposed land uses would be consistent with the land use compatibility zones of the Nut Tree ALUCP and the Travis Air Force Base LUCP. Therefore, the safety hazard impact is *less than significant*.




Source: Solano County Department of Environmental Management; Harris Miller & Hanson Inc.; Shutt Moen Associates.

FIGURE 4.8-4

TRAVIS AIR FORCE BASE LAND USE COMPATIBILITY ZONES

h. If within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.

As discussed above, the Nut Tree Airport is located in Vacaville and the Travis Air Force Base is located approximately 2 miles south of the EIR Study Area. The Nut Tree Airport is a public airport, and Travis Air Force Base is a federally owned airport, and the safety impacts related to both are discussed in Section D.1.g. The EIR Study Area does not contain any private airstrips. Therefore, there would be *no impact* associated with risks in the vicinity of a private airstrip.

### 2. Cumulative Impacts

As discussed previously, development allowed by the proposed General Plan would result in the increased use of and potential exposure to hazardous household, commercial, and industrial materials, and could increase exposure to potential hazards associated with wildland fires and aircraft operation. In addition, development allowed by the proposed General Plan could interfere with implementation of emergency response plans. However, potential project-level impacts associated with hazards and hazardous materials would be reduced to a less-than-significant level due to proposed General Plan policies and other local, regional, State, and federal regulations, such as those that control the production, use, and transportation of hazardous materials and waste. Since impacts associated with hazardous materials, wildland fire, and airport hazards are, by their nature, focused on specific sites or areas, the less-than-significant impacts within the EIR Study Area would not contribute to a cumulative increase in hazards in the rest of the county. Therefore, the potential for cumulative impacts associated with safety and hazards would be *less than significant.*

## *E. Full Buildout*

The full buildout anticipated under the proposed General Plan would include significantly more development than the 2035 horizon-year development projection analyzed in Section D in terms of both the amount and the extent of development. Therefore, the potential for impacts related to hazards and safety would increase. However, as discussed in Chapter 3, Project Description, it is extremely unlikely that full buildout would ever occur under the proposed General Plan. Therefore, an analysis of full buildout is not required by CEQA.