

4.15 WILDFIRE

4.15.1 INTRODUCTION

The Wildfire chapter of the EIR summarizes the existing wildfire setting information and identifies wildfire potential within the project area. The chapter describes the fire types that occur in the project region, wildland fire hazards associated with the project site/Biological Resources Preservation Alternative (BRPA) site, the fire history of the project region, the fuel treatment projects, such as mechanical thinning and prescribed fire, within the region, and consideration of site-specific factors that may affect the wildfire potential at the project site/BRPA site. The information contained in the analysis is primarily based on publicly available information provided by the California Department of Forestry and Fire Protection (CAL FIRE), the California Public Utilities Commission (CPUC), the Davis Fire Department, the City of Davis General Plan,¹ the City's General Plan EIR,² and the Yolo County 2030 Countywide General Plan.³

4.15.2 EXISTING ENVIRONMENTAL SETTING

The following section describes the existing wildfire setting in the project region, including the existing fire types, wildland fire hazards, public safety power shutoffs, fire protection agencies and resources in the project region, and emergency vehicle access.

Fire Types

The following sections describe the three fire types to which various areas of Yolo County are at risk of experiencing.

Wildfires

Wildfires occur on mountains, hillsides, and grasslands. Vegetation, wind, temperature, humidity, and slope are all factors that affect how wildfires spread. Yolo County is considered a rural/suburban County. Wildland fire danger varies throughout the County, as the County is characterized by relatively level valley floor landscapes in the southern and eastern portions of the County, where the City of Davis is located. Such lack of topography and complex fuels leads to very little severe fire behavior. However, the climate of the Yolo County region, which often includes seasonal drought conditions, can keep vegetation dry, which can make the region's vegetation more readily combustible during fire season. In the City of Davis, to which the project site/BRPA site is currently adjacent, the wildland fire hazard season lasts from early spring through late fall. Agricultural land surrounding the City provides limited fuel when crops are present that could allow wildfires to spread across large tracts of land; although, irrigation practices and fallow agricultural land limit the potential of wildfire spread. In the increasingly hilly landscapes that rise in the northern and western portions of the County, the rugged topography creates a landscape where fires can spread rapidly upslope and access for suppression equipment is limited.

¹ City of Davis. *City of Davis General Plan*. Adopted May 2001, Amended January 2007.

² City of Davis. *Final Program EIR for the City of Davis General Plan Update and Final Project EIR for Establishment of a New Junior High School*. Certified May 2001.

³ Yolo County. *2030 Countywide General Plan*. Adopted November 2009.



Wildland-Urban Interface Fires

The wildland-urban interface (WUI) zone is an area where buildings and infrastructure (e.g., cell towers, schools, water supply facilities) mix with areas of wildland vegetation susceptible to ignition due to several factors, including topographical features, vegetation fuel types, local weather conditions, and prevailing winds. The interface is sometimes divided into the defense zone (areas near communities, usually about 0.25-mile wide) and threat zones (an approximately 1.25-mile buffer around the defense zone). In the WUI zone, efforts to prevent ignitions and limit wildfire losses hinge on hardening structures and creating defensible space through a multi-faceted approach, including engineering, enforcement, education, emergency response, and economic incentive. Different strategies in the defense and threat zones of the WUI help to limit the spread of fire and reduce risks to people and property.

The Yolo County Community Wildfire Protection Plan (CWPP)⁴ defines the WUI zone as any populated area that falls within a high-severity fire hazard area, as mapped by the 2021 Yolo County Quantitative Wildfire Risk Assessment (QWRA).⁵ The results of the County's QWRA show that many of the threats from wildfire, including those within the WUI zone, occur in the western portion of the County, which borders Napa and Solano counties along the Blue Ridge Mountain ridges and slopes. Pockets of moderate-to-high threat in the County's interior include areas east of Capay Valley, west of and surrounding the City of Winters, and along the Dunnigan Hills west of Interstate 5 (I-5). As shown in Figure 4.15-1, the City of Davis is not located in a high-severity fire hazard area, as mapped by CAL FIRE, and is, thus, not within the WUI zone.

Structural Fires

Urban fires occur in developed environments, destroying buildings and other human-made structures. Structural fires are often caused by faulty wiring, mechanical equipment, or combustible construction materials and can proliferate due to the absence of fire alarms and sprinkler systems. Structural fires have been due largely to human accidents, although deliberate fires (arson) may be a cause of some events. Older buildings that lack modern fire safety features may face greater risk of damage from fires. To minimize fire damage and loss, the City's Fire Code (Davis Municipal Code Chapter 13) incorporates the California Fire Code (CFC) and sets standards for building and construction. The City's Fire Code requires the provision of adequate water supply for firefighting, automatic fire sprinkler systems, fire-retardant construction, and minimum street widths, among other things.

Wildland Fire Hazards

The following sections include discussions on wildfire classifications; the effects of topography, vegetation, and prevailing winds on wildfire, and the large fire history of Yolo County.

Wildland Fire Classifications

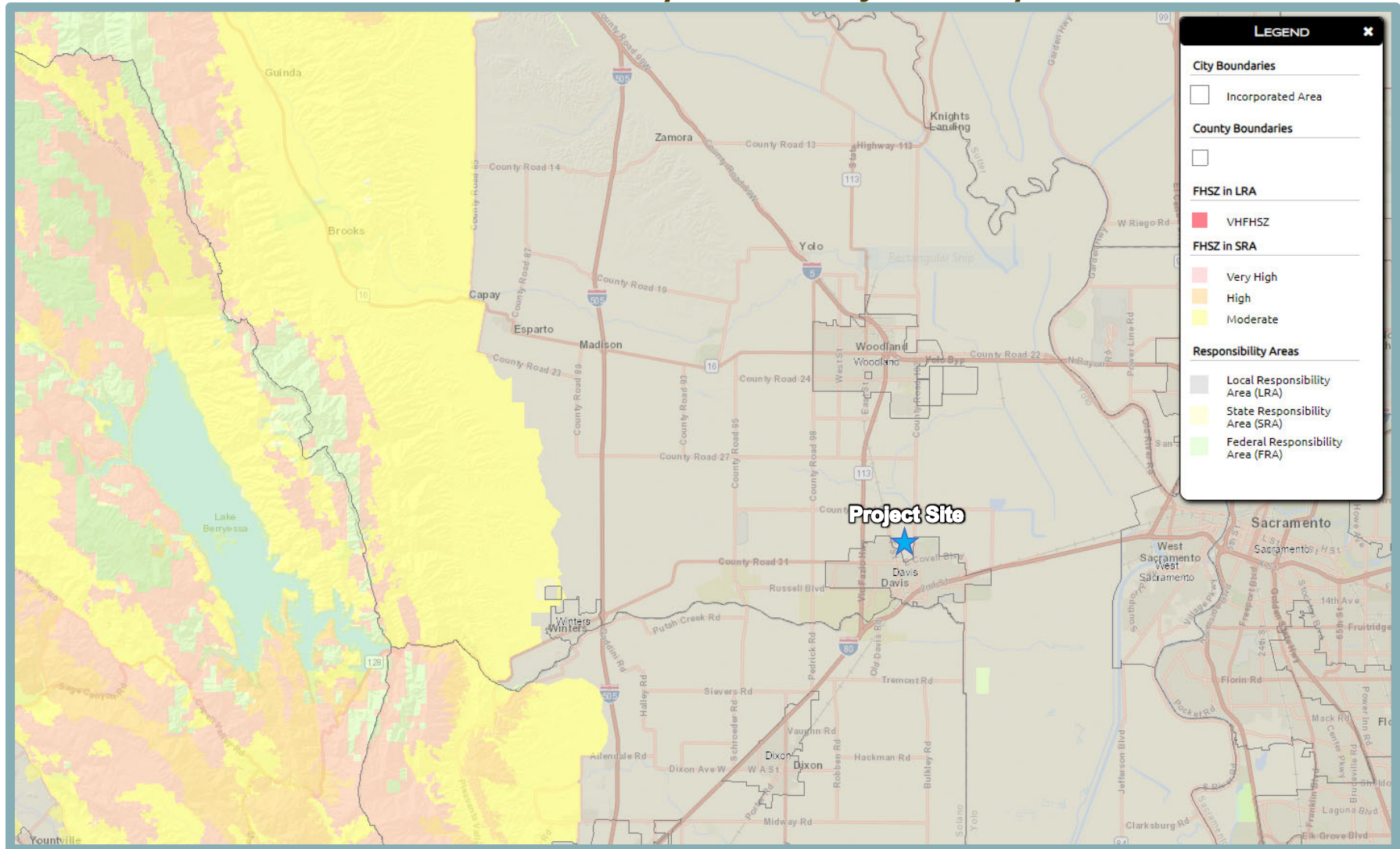
With respect to wildland fires, previous significant WUI fires within the State have precipitated the passage of statutes necessitating the classification of wildland fire hazard areas, according to a location's potential for causing ignitions to buildings. Such classifications are referred to as Fire Hazard Severity Zones (FHSZs) and provide the basis for application of various mitigation strategies to reduce risks to buildings associated with wildland fires.

⁴ It should be noted that the Yolo County CWPP is not a regulatory document. Rather, the Yolo County CWPP provides wildfire hazard and risk assessments, community descriptions, and options for addressing issues of vulnerability to wildfire, all while outlining a priority list of projects that can efficiently reduce risk of property damage, environmental harm, and loss of life.

⁵ Yolo County Resource Conservation District. *Yolo County Community Wildfire Protection Plan*. March 2023.



**Figure 4.15-1
Fire Hazard Severity Zones in Project Vicinity**



Source: CAL FIRE, Fire Hazard Severity Zone Viewer, 2024.



The zones also relate to the requirements for building codes designed to reduce the ignition potential of buildings in the WUI zones.

Pursuant to Government Code Section 51178, Very High FHSZs are determined by the Director of Forestry and Fire Protection, based on consistent statewide criteria and the severity of fire hazard that is expected to prevail in such areas. Very High FHSZs are based on fuel loading, slope, fire weather, and other relevant factors, including areas where Santa Ana, Mono, and Diablo winds have been identified by CAL FIRE as a major cause of wildfire spread. Public Resources Code (PRC) Sections 4201 through 4204 direct CAL FIRE to map fire hazards within State Responsibility Areas (SRAs), based on relevant factors such as fuels, terrain, and weather. SRAs are recognized by the Board of Forestry and Fire Protection as areas where CAL FIRE is the primary emergency response agency responsible for fire suppression and prevention.

The project site is not located within an SRA but, rather, is located within a Local Responsibility Area (LRA). As shown in Figure 4.15-1, the project site is identified by CAL FIRE as being within a Non-Very High FHSZ area. Additionally, as previously discussed, the project site is not located within a WUI zone, as defined by the Yolo County CWPP.

Topography and Vegetation

Topography, which includes slope and aspect, can play a significant role in wildfire risk. Fires burn faster uphill than downhill, due to fuels above a fire being brought into closer contact with upward moving flames. In addition, the process of heat transfer is influenced by topography, because heat rises (convection) and heat transfer through convection tends to move upward. Furthermore, during wildfires, burning materials on the forest floor also create convection currents that preheat the leaves and branches of shrubs and trees above the fire. Heat transfer, therefore, occurs more rapidly through fuels up a slope, resulting in fire traveling more quickly upslope than downslope.

Vertical air currents can also lift burning materials, as floating embers, known as firebrands, can settle in unburned areas ahead of a fire, starting smaller fires. The phenomenon is called spotting and can result in rapid advancement of a fire.

With respect to the project region's topography and vegetation, as previously discussed, the County is characterized by relatively level valley floor landscapes in the southern and eastern portions of the County, where the City of Davis is located and, thus, does not contain steep or significant slopes, such as those in steep-walled canyons or mountainous valleys. The absence of steep and significant slopes limits wildfire risks related to topography in the project region. With respect to vegetation, much of the area surrounding Davis is used for agriculture, as agriculture is the most significant industry in the region. Irrigation of agricultural land limits dry conditions associated with the region's seasonal droughts and concurrently limits the potential of wildfire spread.

With respect to the topography of the project site/BRPA site, the site consists of generally flat, agricultural land, which substantially limits the existing potential for on-site fire spread. With respect to vegetation, other than the on-site seasonally planted crops, the other primary source of vegetation is the existing trees within the project site/BRPA site, which include planted trees located along East Covell Boulevard and along the southern-most west boundary of the site, as well as trees located along both sides of Channel A and those that occur in association with the on-site agricultural structures. The on-site trees provide limited fuel for wildfire.



With respect to the topography and vegetation of areas within the surrounding project vicinity, the project site/BRPA site is bounded by Pole Line Road to the east; East Covell Boulevard to the south; the Union Pacific Railroad (UPRR) mainline, F Street, and Cannery development to the west; and Davis Paintball, Blue Max Kart Club, and agricultural land to the north. Other surrounding uses include single- and multi-family residences, the Nugget Fields sports center, Wildhorse Golf Club, and commercial offices to the east, across Pole Line Road; and commercial uses, single- and multi-family residences, and commercial offices to the south, across East Covell Boulevard. The foregoing uses and areas in the immediate project vicinity limit the existing potential for fire to spread to the project site.

Prevailing Winds

The predominant average hourly wind direction in the City of Davis varies throughout the year. Northerly winds, which could blow from the agricultural land from the north towards the project site, are most dominant from mid-October to late-February. In addition, winds also occur from the west for a portion of the year, especially during the summer months.⁶

Large Fire History

According to CAL FIRE, relatively few larger wildfires, defined as 10 acres or greater, have occurred within the greater region of the project site/BRPA site over the past three years.⁷ The fires listed below occurred primarily to the north and to the west of the City of Davis. According to CAL FIRE, larger fires did not occur in Yolo County in 2023 and to date in 2024.

- In May 2022, the Quail Fire burned 135 acres in Solano County, along Quail Canyon Road and Pleasants Valley Road, southwest of the City of Winters, approximately 18 miles to the southwest of the project site/BRPA site. Injuries or fatalities were not reported, and structures were not reported as damaged or destroyed.
- In June 2022, the Timm Fire burned 26 acres in Solano County, along Buena Vista Lane and Timm Road, north of the City of Vacaville, approximately 16.2 miles southwest of the project site/BRPA site. Injuries or fatalities were not reported, and structures were not reported as damaged or destroyed.
- In May 2022, the Dunnigan Fire burned 120 acres in Yolo County, along County Road (CR) 11 and CR 86, southwest of Dunnigan, approximately 24.7 miles northwest of the project site/BRPA site. Injuries or fatalities were not reported, and structures were not reported as damaged or destroyed.
- In June 2021, the Creek Fire burned 34 acres in Yolo County, along State Route (SR) 16, north of Rumsey, approximately 34.8 miles to the northwest of the project site/BRPA site. Injuries or fatalities were not reported, and structures were not reported as damaged or destroyed.

CAL FIRE strives to extinguish 95 percent of all wildland fires at 10 acres or less. Additional fires, beyond those listed above, have occurred within the region surrounding the project site over the past three years. The fires, for the most part, were extinguished within the above stated goal of under 10 acres.

⁶ Weather Spark. *Climate and Average Weather Year Round in Davis*. Available at: <https://weatherspark.com/y/1120/Average-Weather-in-Davis-California-United-States-Year-Round>. Accessed March 2024.

⁷ California Department of Forestry and Fire Protection. *Incidents Overview*. Available at: <https://www.fire.ca.gov/incidents/>. Accessed October 2024.



Additionally, according to the Yolo County CWPP, the LNU Lighting Complex fires occurred from August 17, 2020 to October 2, 2020 and included a large complex of fires that burned in Lake, Napa, Sonoma, Solano, and Yolo counties.⁸ Mandatory evacuation orders were issued in Yolo County for the Capay Valley and Golden Bear Estates near the City of Winters. The complex was composed of numerous lightning-sparked fires, most of which were small. While the fires ignited separately from each other, the Hennessey Fire eventually grew to merge with the Gamble, Green, Markley, Spanish, and Morgan fires for a total burn area of 363,220 acres. The fires, which burned in the hills surrounding the cities of Fairfield, Napa, and Vacaville, destroyed 1,491 structures and damaged a further 232 structures. Six people were killed and another five were injured. The LNU Lighting Complex is the sixth-largest wildfire in the recorded history of California.

Public Safety Power Shutoffs

In an effort to prevent fires, the electrical service provider for Yolo County, Pacific Gas & Electric Company (PG&E), initiated public safety power shutoffs (PSPS) in 2019, which may continue in subsequent years until fire risks associated with power lines are decreased. PSPS events involve PG&E turning off electrical service during times when the weather is predicted to have a heightened fire risk from gusty winds and dry conditions. Depending on the fire risks, the power outage events may occur in specific areas or for all PG&E customers across the County.

The CPUC adopted the High Fire-Threat District Map in 2018,⁹ which serves to assist in the public's protection from potential fire hazards associated with overhead powerline facilities and nearby aerial communication facilities by delineating fire-threat areas in the State. Fire-threat areas are designated as Tier 1, 2, or 3, with Tier 1 defined as a High Hazard Zone, Tier 2 as an Elevated Hazard Zone, and Tier 3 as an Extreme Hazard Zone. The project site is not located within an area designated as Tier 1, 2, or 3 (see Figure 4.15-2). As such, the project site would not be regularly subject to PSPS events.

Throughout PSPS events, emergency services in Yolo County remain functional with back-up power supplies, but many businesses and agencies are not operational, which can result in inadequate access to medical services and exposure to excessive heat or cold.

Fire Agencies and Resources

Several fire agencies provide fire protection services in the project region, including wildland fire and structural fire response. The project site/BRPA site is currently located in the Springlake Fire Protection District's service area. Upon annexation of the project site/BRPA site into the City of Davis, the site would be provided fire protection services by the Davis Fire Department (DFD). Because the project site/BRPA site is located within an LRA, the DFD would also be responsible for providing wildland fire suppression services to the site. According to the City, the DFD serves a 133-square mile area containing a population of over 68,000 people, on a total annual budget of nearly \$18 million.¹⁰ The DFD provides pre-hospital emergency medical services; minimizes loss from fires, hazardous materials incidents, natural disasters and other emergency services; and ensures that the community's emergency service resources are effectively and efficiently managed.

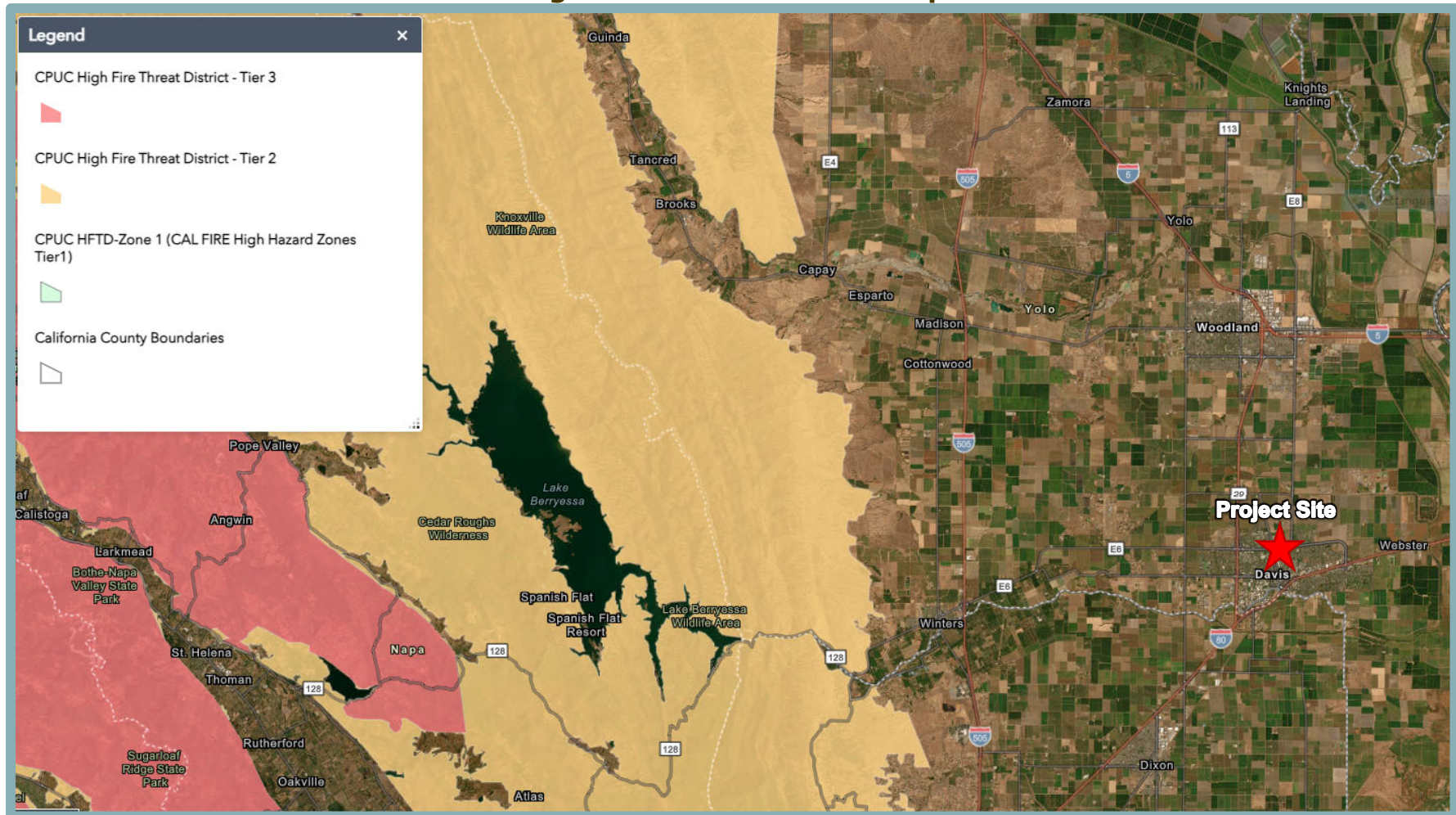
⁸ Yolo County Resource Conservation District. *Yolo County Community Wildfire Protection Plan*. March 2023.

⁹ California Public Utilities Commission. *Fire-Threat Maps and Fire-Safety Regulations Proceedings*. Available at: <https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking>. Accessed March 2024.

¹⁰ City of Davis. *Budget In Brief FY 2024-2025 Adopted Budget*. Available at: <https://www.cityofdavis.org/city-hall/finance/city-budget>. Accessed December 2024.



**Figure 4.15-2
High Fire-Threat District Map**



Source: California Public Utilities Commission, CPUC High Fire Threat District (HFTD) Map, 2024.



The DFD maintains a staff of 42 shift personnel (12 captains and 30 firefighters), one fire chief, two administrative staff, three battalion chiefs, and one fire marshal, for a total of 49 employees. The DFD equipment consists of three engines, one ladder truck, one squad unit, two grass/wildland units, one water tender, three reserve engines, two command vehicles, and two fire prevention staff vehicles, as well as two antique fire apparatus units.

Currently, the required response time goal for the DFD is six minutes for more than 90 percent of all incidents, consistent with the National Fire Protection Association (NFPA) 1710 response time standard.¹¹ NFPA 1710 Section 4.1.2.1 establishes the following performance objectives: 240 seconds (four minutes) or less travel time for the arrival of the first engine company at a fire suppression incident; and 360 seconds (six minutes) or less travel time for the arrival of the second company with a minimum staffing of four personnel at a fire suppression incident.^{12,13} The six-minute response time accounts for a one-minute dispatch processing time, a one-minute turnout time, and a four-minute driving response time. While portions of the project site/BRPA site are located within the four-minute drive time zone, the majority of the project site/BRPA site is currently located outside of the four-minute drive time zone (see Figure 4.12-1 in Chapter 4.12, Public Services and Recreation, of this EIR).

The City's three fire stations are located in Central, West, and South Davis. Shift personnel are divided into three 24-hour-per-day shifts, making for a 56-hour work week. The DFD has contractual agreements with the East Davis County Fire Protection District, the Springlake Fire Protection District, and the No Man's Land Fire Protection District to provide emergency response to the areas of the foregoing providers. The land covered by the City of Davis and the three foregoing fire protection districts is divided into seven emergency first-response areas. The first-response areas provide clearly defined territories for dispatching the nearest fire and emergency medical service (EMS) personnel and equipment to an emergency. In addition, the DFD has an automatic aid agreement with UC Davis and the cities of Woodland, West Sacramento, and Dixon and a mutual aid agreement with all other fire protection agencies in Yolo County and throughout California.

In the event of a wildfire, Yolo County residents can also be contacted through the Alert Yolo system, a component of a partnership between public safety agencies in Yolo, Sacramento, and Placer counties to alert residents about emergency events and other important public safety information through a community notification system. The system enables the Yolo County Office of Emergency Services (OES) to provide the public with critical information quickly in a variety of situations, such as severe weather, unexpected road closures, and evacuations of buildings or neighborhoods. All members of the public can sign up for Alert Yolo through OES' website and elect to receive notifications of emergency situations through various means, including text messages and email.

¹¹ Sandholdt, Patrick, Fire Marshal, Davis Fire Department. Personal communication [email] with Nick Pappani, Vice President, Raney Planning and Management, Inc. April 10, 2024.

¹² Sandholdt, Patrick, Fire Marshal, City of Davis Fire Department. Personal Communication [email] with Nick Pappani, Vice President, Raney Planning and Management, Inc. March 12, 2024.

¹³ Sandholdt, Patrick, Fire Marshal, Davis Fire Department. Personal communication [email] with Nick Pappani, Vice President, Raney Planning and Management, Inc. April 10, 2024.



Emergency Vehicle Access

Fire access can be described as the means by which firefighters can enter an area to quickly mitigate a wildfire incident prior to spread to adjacent properties and critical infrastructure at risk. The project site/BRPA site does not currently provide for designated emergency vehicle access (EVA) roads. Existing roads adjacent to the project site that currently serve as the primary evacuation routes during a wildfire event include East Covell Boulevard and Pole Line Road, as well as SR 113 and Interstate 80 (I-80) in the surrounding area.

4.15.3 REGULATORY CONTEXT

Applicable federal laws or regulations pertaining to wildfire that would directly apply to the Proposed Project or BRPA do not exist. The following provides a general overview of the existing State and local regulations that are relevant to the Proposed Project or BRPA.

State Regulations

The following are the State environmental laws and policies relevant to wildfire.

State Responsibility Area

Pursuant to PRC Sections 4125 through 4128, the Board of Forestry and Fire Protection classifies all lands in the State for the purposes of determining areas in which the financial responsibility of preventing and suppressing wildfire is primarily the responsibility of the State. The classified lands are termed SRAs.

Fire Hazard Severity Zones

FHSZs are geographical areas designated pursuant to PRC Sections 4201 through 4204 and classified as Very High, High, or Moderate in SRAs or as Very High FHSZs in LRAs pursuant to Government Code Sections 51175 through 51189.

The California Code of Regulations (CCR), Title 14, Section 1280 entitles the maps of the geographical areas as “Maps of the Fire Hazard Severity Zones in the State Responsibility Area of California.”

Local Regulations

The following local goals and policies related to wildfire are applicable to the Proposed Project and BRPA.

Yolo County Office of Emergency Services

The Yolo County OES provides emergency management services in cooperation with local cities and special districts, including fire agencies, within the County. During an active incident, such as fire or flood, the OES helps initiate first responses. The functions of OES include emergency planning, response, recovery, and mitigation, including preparation of a Multi-Jurisdictional Hazard Mitigation Plan (HMP), as discussed below.

The OES has created pre-planned evacuation zones throughout Yolo County as part of its “Zonehaven Aware” evacuation management program in order to help the evacuation process in the event of an emergency. The project site/BRPA site is located within Zone YCU-177. The primary planned evacuation route for YCU-177 is West Covell Boulevard, East Covell Boulevard/Mace Boulevard, and Pole Line Road.



The 2023 Yolo County Operational Area Multi-Jurisdictional HMP defines measures to reduce risks from natural disasters in the Yolo County planning area, including unincorporated areas, incorporated cities, and special purpose districts. The HMP was prepared in accordance with the requirements of the Disaster Mitigation Act of 2000 to ensure Yolo County is eligible for the Federal Emergency Management Agency's (FEMA) Pre-Disaster Mitigation and Hazard Mitigation Grant Programs. The purpose of the HMP is to reduce the risk to life and property in Yolo County by decreasing the long-term vulnerability from hazards, including wildfires, through coordinated planning, partnerships, capacity building, and effective risk reduction measures.

City of Davis General Plan

The following goals and policies from the City of Davis General Plan are applicable to the Proposed Project and BRPA.

Police and Fire Chapter

Goal POLFIRE 1 Provide high quality police and fire protection services to all areas of the City.

Policy POLFIRE 1.2 Develop and maintain the capacity to reach all areas of the City with emergency police and fire service within a five-minute emergency response time, 90% of the time. Response time includes alarm processing, turnout time and travel time.

Goal POLFIRE 3 Increase fire safety through provision of adequate fire protection infrastructure, public education and outreach programs.

Policy POLFIRE 3.1 Provide adequate infrastructure to fight fires in Davis.

Policy POLFIRE 3.2 Ensure that all new development includes adequate provisions for fire safety.

Policy POLFIRE 3.3 Make fire protection services visible and accessible to Davis residents.

City of Davis Municipal Code

The following applicable regulations related to wildfire are from the Davis Municipal Code.

Davis Municipal Code Chapter 8: Buildings

Davis Municipal Code Section 8.01.010 adopts by reference the California Building Standards Code (CBSC, Title 24 of the CCR). Section 8.01.040 of the Municipal Code delegates the City's Chief Building Official with the authority to enforce applicable building standards related to fire and panic safety, as well as other regulations of the State Fire Marshal. Both State and local requirements would significantly assist in reducing the threat of a wildfire spreading from undeveloped land to a nearby building.

Davis Municipal Code Chapter 13: Fire Code

Davis Municipal Code Article 13.01 adopts the CFC (Title 24 CCR, Part 9) through Municipal Code Sections 13.01.010 and 13.01.040. The CFC addresses emergency access, access gates,



sprinkler systems, fire alarms within buildings, and construction of access roads to accommodate fire apparatus. The CFC requires that an automatic fire sprinkler and/or fire extinguishing system be installed throughout all new residential buildings.

4.15.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the potential impacts of the Proposed Project and BRPA related to wildfire. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, Section XX, Wildfire, determination of significant impacts related to wildfire is based on whether a project would result in the following, if located in or near SRAs or lands classified as Very High FHSZs:

- Substantially impair an adopted emergency response plan or emergency evacuation plan;
- 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 or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes (see Chapter 5, Effects Not Found to be Significant).

Issues related to whether the Proposed Project or BRPA would result in the following impact are discussed in Chapter 5, Effects Not Found to be Significant, of this EIR:

- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Pursuant to CEQA Guidelines Appendix G, the standards of significance listed above are only relevant when a project's location is within a SRA or Very High FHSZ. The project site/BRPA site is not located within land designated as either. Rather, the site is located within a LRA and is identified by CAL FIRE as being within a Non-Very High FHSZ area. Nevertheless, to provide a conservative analysis, this chapter evaluates the potential impacts of the Proposed Project and BRPA based on the standards listed above.

Method of Analysis

The impact analysis contained in this chapter is based on a review of available CAL FIRE wildfire hazard mapping and recent wildfire history near the City of Davis and Yolo County. In addition, State and local fire hazard regulations were evaluated to identify applicable design requirements for the Proposed Project and BRPA to minimize wildfire risk.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the Proposed Project and BRPA in comparison with the standards of significance identified above.



4.15-1 Substantially impair an adopted emergency response plan or emergency evacuation plan. Based on the analysis below, the impact is *less than significant*.

The following discussion includes an analysis of the potential for development of the Proposed Project and the BRPA to substantially impair an adopted emergency response plan or emergency evacuation plan. Because the Proposed Project and BRPA would be developed within the same overall site boundaries and would have similar potential to affect such plans, the following evaluation applies to both development scenarios.

Proposed Project, Biological Resources Preservation Alternative

Emergency events, like wildland fires, are unpredictable. The location of the fire, the time of day an event occurs, the direction of travel, and the rate of spread are unknown. Due to such uncertainty, the use of traditional capacity analysis, such as AM and PM peak hour operations at study intersections, is limited for the analysis of emergency events. Furthermore, the City of Davis, into which the project site/BRPA site would be annexed as part of project approval, does not have an adopted emergency evacuation plan. However, the County's OES has an adopted HMP and the project site/BRPA site is included in the County's Zonehaven Aware evacuation management program. Both the HMP and Zonehaven Aware program outline emergency-response steps local residents can take in response to local hazards, such as wildfires. In the event of an emergency, emergency responders also have measures that can be deployed to aid in the movement of the public from danger. For instance, during evacuation events, State and/or local emergency responders provide active traffic control at intersections, close roads, provide detours for through traffic, and actively manage available travel lanes to facilitate evacuation away from the emergency. Such measures would be initiated in the event that an evacuation is deemed necessary.

Both the Proposed Project and the BRPA would include new vehicular access points along East Covell Boulevard and Pole Line Road. From East Covell Boulevard, L Street would be extended into the site in a north-to-south direction. In addition, from Pole Line Road, Moore Boulevard, Donner Avenue, and Picasso Avenue would be extended into the site in an east-to-west direction. An additional entrance from Pole Line Road would be constructed in the northeast portion of the site, providing access to a new street that would extend westward through the proposed East Village. In the event of an emergency, multiple evacuation routes would be available. For example, West Covell Boulevard, East Covell Boulevard/Mace Boulevard, and Pole Line Road would serve as the primary evacuation routes to SR 113 and I-80, both of which are located within two miles from the project site boundary and would also serve to further assist in evacuating residents from the greater project region.

Furthermore, both the Proposed Project and BRPA would include 2.5 acres to allow for development of a new on-site fire station. The new fire station would be located in the southern portion of the project site, adjacent to East Covell Boulevard and would improve the emergency response time for underserved homes throughout North Davis that are currently outside of the DFD's recommended response time standard. In addition, the fire station would provide a small amount of space to support police personnel, who would assist in active traffic control in the event of a fire. The fire station



could also potentially include training facilities and a City Emergency Operations Center.

In the event of a wildfire, future residents of the Proposed Project and BRPA could also be contacted through the Alert Yolo system, a component of a partnership between public safety agencies in Yolo, Sacramento, and Placer counties to alert residents about emergency events and other important public safety information through a community notification system. All members of the public can sign up for Alert Yolo through OES' website and elect to receive notifications of emergency situations through various means, including text messages and email.

During project construction, temporary street closures could be required; however, as required by Mitigation Measure 4.13-1 in the Transportation chapter of this EIR, any temporary lane closures would be coordinated with the City Department of Public Works and local emergency services providers. Furthermore, complete closure of roadways is not anticipated.

Based on the above, the Proposed Project or BRPA would not substantially impair an adopted emergency response plan or emergency evacuation plan, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.15-2 Due to factors such as on-site fuel sources, slope, and prevailing winds, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Based on the analysis below, the impact is *less than significant*.

The following discussion includes an analysis of the potential for development of the Proposed Project and the BRPA to exacerbate wildfire risks and expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Because the Proposed Project and BRPA would be developed within the same overall site boundaries and would have similar potential to exacerbate wildfire risks, the following evaluation applies to both development scenarios.

Proposed Project, Biological Resources Preservation Alternative

The following discussions evaluate the potential impacts associated with the Proposed Project and BRPA related to the exacerbation of wildfire risks due to factors such as on-site fuel sources, slope, and prevailing winds.

Wildfire Risks Due to On-Site Fuel Sources

CEQA Guidelines Appendix G indicates that the extent and nature of on-site vegetation, which would serve as fuel for a wildfire, should be evaluated to determine the potential for a project to exacerbate wildfire risk. With respect to vegetation associated with the project site/BRPA site, the site consists primarily of seasonally planted crops and existing trees, the latter of which include planted trees located along



East Covell Boulevard and along the southern-most west boundary of the site, as well as trees located along both sides of Channel A and those that occur in association with the on-site agricultural structure. Development of the Proposed Project and BRPA would include site-clearing activities, which would remove on-site vegetation, including permanent conversion of approximately 367.3 acres of Yolo Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) land cover types with flammable vegetation under the Proposed Project, approximately 324.5 acres of Yolo HCP/NCCP land cover types with flammable vegetation under the BRPA, and 952 trees under both development scenarios. As such, development of the site with the proposed uses would reduce the risk of wildland fire to surrounding areas, because site improvements, such as the proposed structures, internal streets, and irrigated on-site landscaping, would reduce readily combustible vegetation and act as a fuel break. Additionally, wildfire risks would not be anticipated to be exacerbated during project operation, as residential, Neighborhood Mixed-Use, and public, semi-public, and educational uses typically do not involve operational components that would increase the risk of wildfire.

The Proposed Project and the BRPA would be required to comply with all applicable State and local standards and regulations associated with prevention of wildfire hazards, including Davis Municipal Code Sections 8.01.010 and 13.01.010, which serve to adopt and amend, as applicable, the CBSC and CFC. The CFC requires that an automatic fire-sprinkler and/or fire-extinguishing system be installed throughout new one- and two-family dwellings and commercial buildings 3,600 sf and larger. In addition, the project would be subject to the applicable provisions set forth in Davis Municipal Code Chapters 36 and 39, which contains requirements for subdivisions related to water supply for the purposes of fire flow, including provisions related to hydrants, delivery rate, and maintenance of the water system. Furthermore, the DFD enforces standards set forth in the CBSC associated with the installation of residential fire-sprinkler systems and the installation of appropriate roofing materials within all residential units. Both State and local requirements would significantly assist in reducing the threat of a wildfire spreading from agricultural land to the proposed structures, as well as the potential of fire spreading from the site to surrounding areas.

The Proposed Project and BRPA would include preservation of agricultural land as part of the 118.4-acre Urban Agricultural Transition Area (UATA) in the northern portion of the site, as well as various parks (Heritage Oak Park and Village Trails Park) and greenbelts that would occur along portions of all the project site's boundaries and the proposed residential villages. In addition, the BRPA would preserve an approximately 47.1-acre Natural Habitat Area around the alkali playa located south of Channel A. Thus, both the Proposed Project and BRPA would include vegetated areas as part of project operation. However, the agricultural land within the UATA and on-site parks and greenbelts would be regularly irrigated, which would ensure the vegetation is sufficiently watered so as not to result in excessively dry fuel sources. In addition, the existing conditions of the UATA under the Proposed Project and BRPA would remain unchanged, as would the existing conditions of the Natural Habitat Area under the BRPA. Thus, the Proposed Project and BRPA would not exacerbate wildfire risks associated with the UATA, nor would the BRPA as part of preservation of the Natural Habitat Area.



Overall, through removal of on-site vegetation, compliance with State and local regulations, and routine irrigation of the UATA, parks, and greenbelts, the Proposed Project and BRPA would not exacerbate wildfire risks due to on-site vegetation, and a less-than-significant impact would occur.

Wildfire Risks Due to Slope

The project site/BRPA site and the City of Davis do not contain steep or significant slopes, which limits wildfire risks related to topography in the project region. Based on the existing topography of the site, slope would not affect on-site fire behavior, as compared to the increasingly hilly landscapes that rise in the northern and western portions of the County. Therefore, the Proposed Project and BRPA would not exacerbate wildfire risks due to slope, and a less-than-significant impact would occur.

Wildfire Risks Due to Prevailing Winds

With respect to prevailing winds at the project site/BRPA site, as previously discussed, winds from the north are most dominant from mid-October to late-February, which is outside of the season that wildfires in the project region commonly occur. While winds also occur from the west for a portion of the year, especially during the summer months, land west of the site is developed with residential uses, which reduces the potential of wildfire spreading to the project site due to prevailing winds from the west.

As discussed above, the majority of on-site fuel sources would be removed as part of development of the Proposed Project and BRPA. Thus, development of the project site/BRPA site would not exacerbate wildfire risks due to prevailing winds, and a less-than-significant impact would occur.

Conclusion

Based on the above, the Proposed Project and BRPA would not exacerbate wildfire risks due to factors such as site fuel sources, slope, and prevailing winds, and, thereby, would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, a **less-than-significant** impact could occur.

Mitigation Measure(s)

None required.

4.15-3 Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Based on the analysis below, the impact is less than significant.

The following discussion includes an analysis of the potential for development of the Proposed Project and the BRPA to require the installation or maintenance of associated infrastructure that may exacerbate fire risk or result in temporary or ongoing impacts. Because the Proposed Project and BRPA would be developed within the



same overall site boundaries and would require largely similar infrastructure improvements, the following evaluation applies to both development scenarios.

Proposed Project, Biological Resources Preservation Alternative

Development of the Proposed Project and BRPA would include construction of various infrastructure components, including on-site and off-site roadway improvements; connections to existing water, sewer, and power lines; installation of new storm drain lines and a new detention basin; the realignment of a portion of Channel A; potentially a new pedestrian/bicycle undercrossing near the Pole Line Road/Moore Boulevard intersection; and other improvements. All potential physical environmental impacts that could result from development of the Proposed Project or BRPA, including the proposed infrastructure improvements, have been evaluated throughout the technical chapters of this EIR.

The proposed roadway improvements would not exacerbate fire risks, as operation of the roadways does not involve sources of ignition and, thus, would not involve components that could potentially ignite fuel sources. Additionally, new electrical infrastructure installed as part of the Proposed Project and BRPA would be undergrounded, which would reduce fire risks during operations. As previously discussed, the Proposed Project and BRPA would also be subject to the applicable provisions set forth in Davis Municipal Code Chapters 36 and 39, which contains requirements for subdivisions related to water supply for the purposes of fire flow, including provisions related to hydrants, delivery rate, and maintenance of the water system. The fire hydrants within the project site would meet all applicable DFD requirements. Long-term maintenance and operation of the emergency water supply infrastructure would not involve any activities that would result in an increase in wildfire risk.

While the long-term maintenance of the proposed roadways, emergency water supply connections, power lines, and other utilities would not exacerbate fire risks, the activities associated with the initial construction and placement of the utilities and infrastructure could cause a temporary increase in fire risks due to the use of heavy equipment, which would contain combustible materials such as fuels and oils and ignition sources. However, the project contractor would be required to comply with all California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous materials, which would minimize the potential for accidental conditions, including fire.

Based upon the above, the Proposed Project and BRPA would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase



other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

The geographic scope for the cumulative wildfire analysis generally includes buildout of the Proposed Project or BRPA in conjunction with buildout of the Davis General Plan planning area, as well as a list of present and probable future projects. For more details regarding the cumulative setting, refer to Chapter 6, Statutorily Required Sections, of this EIR.

4.15-4 Increase in wildfire risk attributable to the Proposed Project or the BRPA, in combination with cumulative development. Based on the analysis below, the cumulative impact is *less than significant*.

Because the Proposed Project and BRPA would include similar development components within the same overall site boundaries, both development scenarios would have similar potential for resulting in increases in wildfire risks, in combination with cumulative development. As such, the following analysis applies to both development scenarios.

Proposed Project, Biological Resources Preservation Alternative

The cumulative setting for this EIR encompasses the City of Davis' General Plan planning area and present and probable future projects, a portion of which occur adjacent to the City limits. In addition to the Proposed Project/BRPA, Shriners Property, a 234-acre residential subdivision project located north of the East Covell Boulevard/Alhambra Drive intersection, is currently under review by the City. Just west of Shriners Property, north of the East Covell Boulevard/Monarch Lane intersection, is the Palomino Place Project, which is proposed on a 25-acre site and would include single- and multi-family housing, as well as health and training facilities open to the public. Other development projects undergoing planning review are located in the southern portion of the City, including two new multi-family residential apartment buildings, a new commercial hotel building, and a 700-unit residential neighborhood located on the 46.9-acre site formerly known as the Nishi Housing Site. The Bretton Woods University Retirement Community project, located northwest of the West Covell Boulevard/Risling Place intersection, is currently under review by the City of Davis. Finally, though rejected by voters, the City of Davis previously approved the Davis Innovation and Sustainability Campus (DiSC) 2022 Project, which was proposed for a 102-acre site (plus the 16.5-acre Mace Triangle property) located immediately to the east of Mace Boulevard and to the north of CR 32A, northeast of the City limits. Future development within the City of Davis would result in changes to the existing land use environment through conversion of vacant land to developed uses that would result in a reduction of existing vegetation, which would concurrently reduce wildfire sources and the risk of fire spread.

Additionally, the City of Davis and adjacent areas are not located within an SRA. As shown in Figure 4.15-1, the entirety of the City is located within an LRA Non-Very High FHSZ. Additionally, all development facilitated by buildout of the City of Davis General Plan planning area would be subject to existing regulations and guidelines designed



to prevent wildlife hazards. Similar to the Proposed Project/BRPA, development of other areas within or proposed for annexation into the City would be required to comply with Davis Municipal Code Sections 8.01.010 and 13.01.010, which serve to adopt and amend, as applicable, the CBSC and CFC. The DFD enforces standards set forth in the CBSC associated with the installation of residential fire-sprinkler systems and the installation of appropriate roofing materials within all residential units. As such, all buildings would meet all fire code requirements, as set forth by the CBSC and CFC, which could include fire sprinklers and fire alarms, as determined by the City's Fire Chief at building permit stage, depending upon building and occupancy type. Finally, similar to the project site/BRPA site, other sites within the City could currently include fuel sources such as undeveloped vegetated areas. However, development of said parcels, which would be subject to State and local regulations, would remove existing fuel sources, thereby reducing the cumulative risk of wildfire hazards.

Based on the above, the Proposed Project and BRPA, in combination with reasonably foreseeable future development, would have a ***less-than-significant*** cumulative impact related to exacerbating wildfire risk.

Mitigation Measure(s)

None required.

