

4.14 Wildfire

This section summarizes the wildfire risks in and near the Planning Area and analyzes the impacts related to wildfire risks due to the project.

4.14.1 Environmental Setting

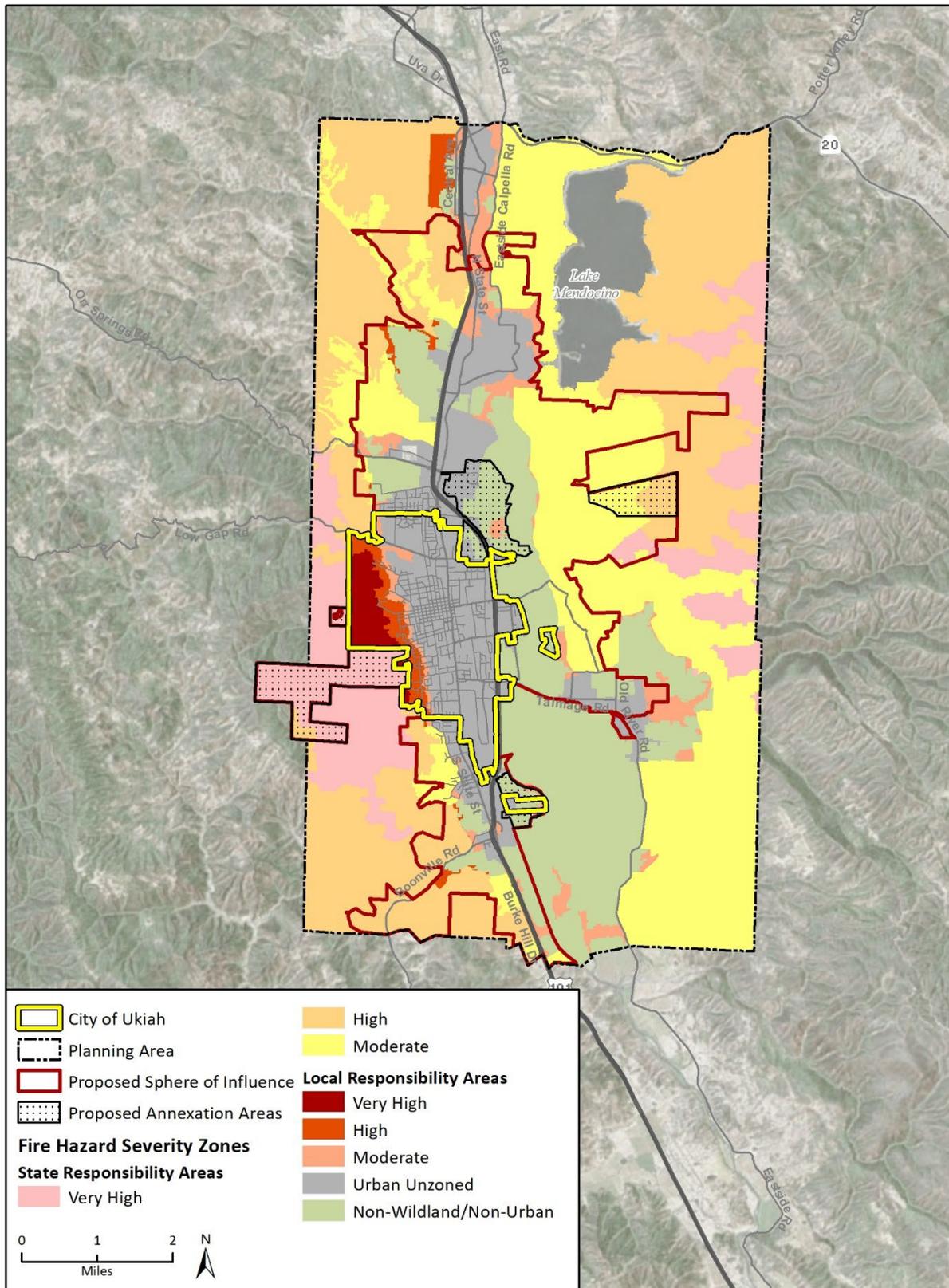
a. Overview of Wildfire

A wildfire is an uncontrolled fire in an extensive area of combustible vegetation. Wildfires differ from other fires in that they take place in areas of grassland, woodlands, brushland, scrubland, peatland, and other wooded areas that act as a source of fuel, or combustible material. Buildings may become involved if a wildfire spreads to adjacent communities. The primary factors that increase an area's susceptibility to wildfire include slope and topography, vegetation type and condition, and weather and atmospheric conditions. The Office of Planning and Research has recognized that although high-density structure-to-structure loss can occur, structures in areas with low- to intermediate-density housing were most likely to burn, potentially due to intermingling with wildland vegetation or difficulty of firefighter access. Fire frequency also tends to be highest at low to intermediate housing density, at least in regions where humans are the primary cause of ignitions (California Natural Resources Agency 2018).

The indirect effects of wildfires can be catastrophic. In addition to stripping the land of vegetation and destroying forest resources, large, intense fires can harm the soil, waterways, and the land itself. Soil exposed to intense heat may lose its capability to absorb moisture and support life. Exposed soils erode quickly and enhance siltation of rivers and streams, thereby enhancing flood potential, harming aquatic life, and degrading water quality. Lands stripped of vegetation are also subject to increased debris flow hazards.

Previous large fires in the surrounding area have impacted Ukiah, including the 2018 Mendocino Complex Fire (Ranch Fire) which burned a total of 410,203 acres throughout Mendocino, Lake, Colusa, and Glenn Counties. The Ranch Fire started near Potter Valley, approximately 12 miles northeast of the Planning Area. Approximately 387 acres within Ukiah city limits is designated as a Very High Fire Hazard Severity Zone (FHSZ) in a Local Responsibility Area, and approximately 1,348 of Ukiah's existing Sphere of Influence (SOI) is within a Very High FHSZ in a State Responsibility Area, as established by the California Department of Forestry and Fire Protection (Cal Fire). Cal Fire has identified much of the region west of the Planning Area as moderate to high fire hazard severity zones, and areas to the north, east, and south as moderate fire hazard severity zones. The City boundary, existing and proposed sphere of influence (SOI), and Cal Fire severity zones are shown in Figure 4.14-1.

Figure 4.14-1 Fire Hazard Severity Zones in the Planning Area



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 Additional data provided by Mendocino County and Cal Dept of Conservation, 2015; CAL FIRE, 2007.

FigX:Wildfire 20220624

Slope and Aspect

According to Cal Fire, sloping land increases susceptibility to wildfire because fire typically burns faster up steep slopes (Cal Fire 2000). Additionally, steep slopes may hinder firefighting efforts. Following severe wildfires, sloping land is also more susceptible to landslide or flooding from increased runoff during substantial precipitation events. Aspect is the direction that a slope faces, and it determines how much radiated heat the slope will receive from the sun. Slopes facing south to southwest will receive the most solar radiation. As a result, this slope is warmer and the vegetation drier than on slopes facing a northerly to northeasterly direction, increasing the potential for wildfire ignition and spread (Cal Fire 2000).

Generally, the urbanized area of Ukiah is located primarily to the east of Highway 101, with some urbanized area, mostly outside of city limits, to the west. Topography in Ukiah is generally flat (USGS 2015). Because Ukiah is primarily flat and not sloping, it has no distinguishable aspect. However, east and west of the city limits within the proposed SOI, there is steep sloping topography. While there are various sub-ridges and slopes in the hillside area outside of the City, the overall aspect is to the north or south.

Vegetation

Vegetation is fuel to a wildfire and it changes over time with seasonal growth and die-back. The relationship between vegetation and wildfire is complex, but generally some vegetation is naturally fire resistant, while other vegetation is extremely flammable. It is worth noting that some plant types in California landscapes are fire resistant, while others are fire dependent for their seed germination cycles. Wildfire behavior depends on the type of fuels present, such as ladder fuels, surface fuels, and aerial fuels. Ladder fuels provide a path for a surface fire to climb upward into the crowns of trees; surface fuels include grasses, logs, and stumps low to the ground; and aerial fuels include limbs, foliage, and branches not in contact with the ground (Cal Fire 2022). Weather and climate conditions, including drought cycles, can lead to dry vegetation with low moisture content, increasing its flammability.

Vegetation cover within Ukiah, excluding landscaped lawns, includes a diverse range of plant species within terrestrial and aquatic habitat types, including riparian woodlands along the Russian River on the eastern edge of city limits, and oak woodlands to the west of the city. Vegetation cover in the City is described in Section 4.4, *Biological Resources*. Some of the vegetation in these habitats may present an increased risk to wildfires, including dry grasses on hillsides adjacent to the City. Dry grasslands and dead or diseased trees in the hillside area are highly susceptible to wildfire.

Weather and Atmospheric Conditions

Wind, temperature, and relative humidity are the most influential weather elements in fire behavior and susceptibility (National Parks Service 2022). Fire moves faster under hot, dry, and windy conditions. Wind may also blow embers ahead of a fire, causing its spread. Drought conditions lead to extended periods of excessively dry vegetation, increasing the fuel load and ignition potential.

According to the National Oceanic and Atmospheric Administration (NOAA), most precipitation within the state is received from November through March, with an average annual rainfall of approximately 18 inches (NOAA 2022). May through September is the driest time of the year and coincides with what has traditionally been considered the fire season in California. However, increasingly persistent drought and climatic changes in California have resulted in drier winters, and fires during the autumn, winter, and spring months are becoming more common. Prevailing winds

in Ukiah vary, but generally travel north to south in the winter and west to east in the summer (WeatherSpark 2022).

b. Wildfire Hazards

In California, responsibility for wildfire prevention and suppression is shared by federal, state, and local agencies. Federal agencies are responsible for federal lands in Federal Responsibility Areas. The State of California has determined that some non-federal lands in unincorporated areas with watershed value are of statewide interest and have classified those lands as State Responsibility Areas (SRA), which are managed by Cal Fire. All incorporated areas and other unincorporated lands are classified as Local Responsibility Areas (LRA).

While nearly all of California is subject to some degree of wildfire hazard, there are specific features that make certain areas more hazardous. Cal Fire is required by law to map areas of significant fire hazards based on fuels, terrain, weather and other relevant factors (Public Resources Code [PRC] 4201-4204 and California Government Code 51175-89). As described above, the primary factors that increase an area's susceptibility to fire hazards include slope, vegetation type and condition, and atmospheric conditions. Cal Fire maps fire hazards based on zones, referred to as FHSZs. Cal Fire maps three zones on SRA: 1) Moderate FHSZs; 2) High FHSZs; and 3) Very High FHSZs. Only the Very High FHSZs are mapped for LRA. Each of the zones influence how people construct buildings and protect property to reduce risk associated with wildland fires. Under state regulations, areas within Very High FHSZ must comply with specific building and vegetation management requirements intended to reduce property damage and loss of life within these areas.

The City of Ukiah contains approximately 387 acres of Very High FHSZs in an LRA along the western city limits, and is bounded by a Very High FHSZ in an SRA to the west. The proposed SOI as part of Ukiah 2040 would contain Very High FHSZ in an SRA, as shown in Figure 4.14-1.

In 2003, Cal Fire constructed a shaded fuel break (north to south) along the base of the western hills along the entire length of the city to reduce fuel loads and protect the community from wildfire risk (Mendocino County Fire Safe Council 2022). A shaded fuel break is a forest management strategy used for mitigating the threat of wildfire leading to a dangerous buildup of combustible vegetation. The goal of a shaded fuel break is to thin the surface vegetation, conduct selective thinning, remove dead and down woody material, and remove ladder fuels to prevent a catastrophic fire and prevent the loss of structures. Maintenance was performed on the 100-foot wide, 2.6-mile fuel break in late 2018 and early 2019, with ongoing annual maintenance performed by the property owners and the City.

4.14.2 Regulatory Setting

a. Federal Regulations

The Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 requires a state-level mitigation plan as a condition of disaster assistance. There are two different levels of state disaster plans: "Standard" and "Enhanced." States that develop an approved Enhanced State Plan can increase the amount of funding available through the Hazard Mitigation Grant Program. The Act also established new requirements for local mitigation plans.

National Fire Plan

The National Fire Plan was developed in August 2000, following a historic wildfire season. Its intent is to establish plans for active response to severe wildfires and their impacts to communities while ensuring sufficient firefighting capacity. The plan addresses firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

b. State Regulations

California Board of Forestry

The Board of Forestry maintains fire safe road regulations as part of Title 14 of the California Code of Regulations (CCR). This includes requirements for road width, surface treatments, grade, radius, turnarounds, turnouts, structures, driveways, and gate entrances with SRAs. These regulations are intended to ensure safe access for emergency wildland fire equipment and civilian evacuation.

California Fire and Building Codes (2019)

The California Fire Code is Chapter 9 of CCR Title 24. It establishes the minimum requirements consistent with nationally-recognized good practices to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structure, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of substances that may pose a threat to public health and safety. The California Fire Code regulates the use, handling and storage requirements for hazardous materials at fixed facilities. The California Fire Code and the California Building Code (CBC) use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines and specialized equipment. To ensure that these safety measures are met, the California Fire Code employs a permit system based on hazard classification. The provisions of this Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or appurtenances connected or attached to such building structures throughout California.

More specifically, the Fire Code is included in Title 24 of the CCR. Title 24, part 9, Chapter 7 addresses fire-resistances-rated construction; CBC (Part 2), Chapter 7A addresses materials and construction methods for exterior wildfire exposure; Fire Code Chapter 8 addresses fire related Interior finishes; Fire Code Chapter 9 addresses fire protection systems; and Fire Code Chapter 10 addresses fire related means of egress, including fire apparatus access road width requirements. Fire Code Section 4906 also contains existing regulations for vegetation and fuel management to maintain clearances around structures. These requirements establish minimum standards to protect buildings located in FHSZs within SRAs and Wildland-Urban Interface (WUI) Fire Areas. This code includes provisions for ignition-resistant construction standards for new buildings.

Wildland-Urban Interface Building Standards

On September 20, 2007, the Building Standards Commission approved the Office of the State Fire Marshal's emergency regulations amending the CCR Title 24, Part 2, known as the 2007 CBC. These codes include provisions for ignition-resistant construction standards in the WUI.

Interface zones are areas with dense housing adjacent to vegetation that can burn and meeting the following criteria:

1. Housing density class 2 (one house per 20 acres to one house per 5 acres), 3 (more than one house per 5 acres to one house per acre), or 4 (more than one house per acre)
2. In Moderate, High, or Very High Fire Hazard Severity Zone
3. Not dominated by wildland vegetation (i.e., lifeform not herbaceous, hardwood, conifer, or shrub)
4. Spatially contiguous groups of 30-meter cells¹ that are 10 acres and larger

Intermix zones are housing development interspersed in an area dominated by wildland vegetation and must meet the following criteria:

1. Not interface
2. Housing density class 2
3. Housing density class 3 or 4, dominated by wildland vegetation
4. In moderate, high, or very high fire hazard severity zone
5. Improved parcels only
6. Spatially contiguous groups of 30-meter cells 25 acres and larger

Influence zones have wildfire-susceptible vegetation up to 1.5 miles from an interface zone or intermix zone.

The California Fire Plan

The Strategic Fire Plan for California is the State’s road map for reducing the risk of wildfire. The most recent version of the Plan was adopted in January 2019 and directs each Cal Fire Unit to revise and update its locally-specific Fire Management Plan (Cal Fire 2018). These plans assess the fire situation within each of the 21 Cal Fire units and six contract counties. These plans address wildfire protection areas, initial attack success, assets and infrastructure at risk, pre-fire management strategies, and accountability within their geographical boundaries.

California Office of Emergency Services

The California Office of Emergency Services (CalOES) prepares the State of California Multi-Hazard Mitigation Plan (SHMP). The SHMP identifies hazard risks and includes a vulnerability analysis and a hazard mitigation strategy. The SHMP is federally required under the Disaster Mitigation Act of 2000 for the State to receive Federal funding. The Disaster Mitigation Act of 2000 requires a State mitigation plan as a condition of disaster assistance.

State Emergency Plan

The foundation of California’s emergency planning and response is a statewide mutual aid system which is designed to ensure that adequate resources, facilities, and other support is provided to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation.

The California Disaster and Civil Defense Master Mutual Aid Agreement (California Government Code Sections 8555–8561) requires signatories to the agreement to prepare operational plans to

¹ Note that “30-meter cells” refers to raster data, and indicates data is presented as 30-meter by 30-meter squares.

use within their jurisdiction, and outside their area. These plans include fire and non-fire emergencies related to natural, technological, and war contingencies. The State of California, all State agencies, all political subdivisions, and all fire districts signed this agreement in 1950.

Section 8568 of the California Government Code, the “California Emergency Services Act,” states that “the State Emergency Plan shall be in effect in each political subdivision of the state, and the governing body of each political subdivision shall take such action as may be necessary to carry out the provisions thereof.” The Act provides the basic authorities for conducting emergency operations following the proclamations of emergencies by the Governor or appropriate local authority, such as a City Manager. The provisions of the act are further reflected and expanded on by appropriate local emergency ordinances. The Act further describes the function and operations of government at all levels during extraordinary emergencies, including war.

All local emergency plans are extensions of the State of California Emergency Plan. The State Emergency Plan conforms to the requirements of California’s Standardized Emergency Management System (SEMS), which is the system required by Government Code 8607(a) for managing emergencies involving multiple jurisdictions and agencies (CalOES 2022). The SEMS incorporates the functions and principles of the Incident Command System, the Master Mutual Aid Agreement, existing mutual aid systems, the operational area concept, and multi-agency or inter-agency coordination. Local governments must use SEMS to be eligible for funding of their response-related personnel costs under state disaster assistance programs. The SEMS consists of five organizational levels that are activated as necessary, including: field response, local government, operational area, regional, and state. CalOES divides the state into several mutual aid regions. The Planning Area is located in Mutual Aid Region II, which includes Del Norte, Humboldt, Mendocino, Sonoma, Lake, Napa, Marin, Solano, Contra Costa, San Francisco, San Mateo, Alameda, Santa Clara, Santa Cruz, San Benito, and Monterey Counties (CalOES 2019).

Government Code Sections 65302 and 65302.5, Senate Bill 1241 (Kehoe) of 2012

Senate Bill (SB) 1241 requires cities and counties to address fire risk in SRAs and Very High FHSZs in the safety element of their general plans. The bill also directed amendments to the CEQA Guidelines Appendix G environmental checklist to include questions related to fire hazard impacts for projects located in or near lands classified as SRAs and Very High FHSZs.

California Public Utilities Commission General Order 166

General Order 166 Standard 1.E requires that investor-owned utilities develop a Fire Prevention Plan which describes measures that the electric utility will implement to mitigate the threat of power-line fires generally. Additionally, this standard requires that investor-owned utilities outline a plan to mitigate power line fires when wind conditions exceed the structural design standards of the line during a Red Flag Warning in a high fire threat area. Fire Prevention Plans created by investor-owned utilities are required to identify specific parts of the utility’s service territory where the conditions described above may occur simultaneously. Standard 11 requires that utilities report annually to the California Public Utilities Commission (CPUC) regarding compliance with General Order 166 (CPUC 2017). In compliance with Standard 1.E of this General Order, Pacific Gas and Electric Company adopted a Fire Prevention Plan dated October 31, 2018.

c. Regional and Local Regulations

Mendocino County Multi-Jurisdictional Hazard Mitigation Plan

The Mendocino County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP), adopted by the City of Ukiah in 2021, identifies effective and feasible actions to reduce the risks posed by potential hazards in Mendocino County and the jurisdictions within the county, including the City of Ukiah. The City of Ukiah Jurisdictional Annex within the MJHMP assesses various risks from hazards such as climate change, drought, flooding, earthquakes and geologic hazards, extreme weather, pandemic diseases, and wildfire; lists mitigation actions; and describes the process of implementing, monitoring, and evaluating the plan. Wildfire is considered a high-priority, countywide threat (County of Mendocino 2021).

City of Ukiah Emergency Operation Plan

The City of Ukiah Emergency Operation Plan, adopted in May 2021, is designed to ensure continuity of essential services operations during an emergency or disaster. The plan specifies the policies, roles, resources, and actions necessary to managing a local emergency, including those related to wildfire events. The plan is consistent with federal and state laws governing emergency response planning and adopts the National Incident Management System (City of Ukiah 2021).

Ukiah City Code

Ukiah City Code Section 3000 adopts the 2019 California Building Standards Code, Title 24, Part 9, California Fire Code. The California Fire Code contains regulations consistent with nationally-recognized and accepted practices for safeguarding life and property from hazards of fire and explosion; dangerous conditions arising from the storage, handling, and use of hazardous materials; and hazardous conditions in the use or occupancy of buildings. Additionally, although properties within the City limits are not located within an SRA, the City of Ukiah (Ukiah City Code Section 5200) has adopted the SRA regulations for lands within the City limits located in High or Very High FHSZs. This includes development standards contained within Public Resources Code Sections 4290 and 4291, which are designed to provide defensible space and fire protection for new construction and ensure adequate emergency access: increased property line setbacks for all applicable construction; on-site water storage for fire protection, driveway/roadway types and specifications based on designated usage; all weather driveway/roadway surfaces being engineered for 75,000 pound vehicles; maximum slope of 16 percent; turnout requirements; gate requirements and setbacks, parking standards, fuels reduction regulations, etc.

Additionally, the Hillside Overlay District (which also generally overlaps with Very High FHSZs) includes strict development standards for residential development relating to fire hazards, including increased setbacks, the restriction of using combustible roof materials, water and fire hydrant requirements, slope requirements, etc. All construction in this district also requires discretionary review, even for development that would normally be ministerial, such as single-family homes.

4.14.3 Impact Analysis

a. Thresholds and Methodology

The following thresholds of significance are based on Appendix G to the CEQA Guidelines. For purposes of this EIR, since the Planning Area is within two miles of an SRA, implementation of the project may have a significant adverse impact if it would do any of the following:

1. Substantially impair an adopted emergency response plan or emergency evacuation plan;
2. 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;
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;
4. 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; or
5. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

The assessment of impacts related to wildfire hazards and risks were evaluated using FHSZ mapping, aerial imagery, and topographic mapping. Weather patterns related to prevailing winds and precipitation trends were evaluated as they relate to the spread and magnitude of wildfire. CEQA does not generally require an agency to consider the effects of existing environmental conditions on a project's future users or residents. Consequently, impacts under the thresholds identified below would only be considered significant if the project risks exacerbating those existing environmental conditions.

b. Project Impacts and Mitigation Measures

Threshold 1: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Impact WFR-1 BUILDOUT OF THE PROJECT COULD RESULT IN NEW DEVELOPMENT IN VERY HIGH FHSZs. HOWEVER, EXISTING LOCAL AND STATE REGULATIONS, AND UKIAH 2040 PROPOSED POLICIES ADDRESS EMERGENCY PLANNING, MANAGEMENT, ACCESS, AND EDUCATION; AS WELL AS ENFORCE MAINTAINING AN EMERGENCY MANAGEMENT PLAN. THESE REGULATIONS AND PROPOSED POLICIES WOULD ADDRESS ISSUES RELATED TO ACCESS AND EMERGENCY RESPONSE AND THE PROJECT WOULD NOT IMPAIR AN EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Development facilitated by the project could introduce new residents or employees who would require emergency response evacuation in the case of a wildfire. The Safety Element of Ukiah 2040 includes proposed goals and policies to ensure safe and efficient evacuation and emergency response. Applicable goals and policies are as follows:

Goal SAF-4: To maintain adequate and effective fire protection services for Ukiah.

Policy SAF-4.1: Fire Service Rating. The City shall optimize the [Insurance Services Officer] ISO ratings of the Ukiah Valley Fire Authority to Class 1 by prioritizing agency needs and balancing cost/quality trade-offs.

Goal SAF-5: To minimize wildland fire risk to project life and property.

Policy SAF-5.3: Evacuation Routes. The City shall identify and maintain adequate evacuation routes in the city to safeguard human life in the case of fire.

Policy SAF-5.4: Roadway Vegetation Clearance. The City shall maintain an adequate vegetation clearance on public and private roads to mitigate wildfire hazards.

Policy SAF-5.10: Fire Safety Education Programs. The City shall coordinate with the Ukiah Valley Fire Authority to inform property owners and residents of the most recent best practices in building and land management and fire safety measures to protect people and property from fire hazards.

Goal SAF-6: To ensure that the City is adequately prepared for emergencies of any variety through effective planning measures.

Policy SAF-6.1: Evacuation Routes. The City shall coordinate with the Ukiah Valley Fire Authority to review, update, and periodically exercise emergency access, protocols, and evacuation routes to assess their effectiveness.

Policy SAF-6.2: Hazard Mitigation Plan. The City shall continue to participate in and implement the Mendocino County Hazard Mitigation Plan to ensure maximum preparedness for hazard events.

Policy SAF-6.3: Locally Focused Plans. The City shall maintain and implement locally focused plans, including an Emergency Operations Plan, to maintain consistency with State and Federal requirements.

Policies listed above direct the City to ensure effective and coordinated response to disasters, which would include events warranting evacuation. Ukiah 2040 also includes proposed policies that support improved preparation and response through public education and ensuring adequate access in reference to wildfires through Policies SAF-4.1 and SAF-5.10. These proposed goals and related policies in the Safety Element of Ukiah 2040 would ensure adequate emergency response and evacuation.

The City of Ukiah Jurisdictional Annex of the MJHMP includes several mitigation actions related to maintaining emergency response and evacuation plans. Mitigation Action DF-MCOE-256 encourages development of a disaster warning system to disseminate warnings and information across Mendocino County. Further, Mitigation Action EQ-MCOE-254 encourages the Mendocino County Office of Education to draft and adopt an emergency operations plan to identify alternative transportation routes in case of a natural disaster. These mitigation actions would ensure that residents are prepared to react to a wildfire emergency and would have advance notice to evacuate. The project would be consistent with these actions by supporting them with Ukiah 2040 goals and policies.

The City of Ukiah Emergency Operation Plan outlines emergency response priorities for a variety of emergency situations, including wildfire. In the event of a wildland/urban interface fire, the plan guides the City in determining the nature and extent of the fire, assessing and activating evacuation

orders, and establishing communication with impacted areas. The project would be consistent with this plan by supporting it with the Ukiah 2040 goals and policies listed above.

In addition, the Ukiah Valley Fire Authority reviews and approves development projects to ensure that emergency access standards are met, and therefore development facilitated by the project would be reviewed to ensure that it does not hinder emergency access or evacuation.

Specific to residential construction within Very High FHSZs, future residential construction within the proposed Hillside Overlay District would require discretionary review. Specifically, residential units would not be developed until an applicant submits a project-specific site plan with a Use Permit application and receives Planning Commission approval for development of their residence, in accordance with the Hillside Overlay District regulations. The Hillside Overlay District includes strict development standards relating to fire hazards including increased setbacks, the restriction of using combustible roof materials, water and fire hydrant requirements, slope requirements, etc. The Use Permit process for construction within the Hillside Overlay District would provide another layer of review for safety standards related to wildfire that would otherwise not be required for by-right housing within the western hills.

Lastly, implementation of Ukiah 2040 policies and actions associated with emergency planning and response, in addition to adherence to MJHMP Mitigation Actions and fire department review, would ensure that potential impacts from implementation of the project on emergency response and evacuation would be less than significant.

Mitigation Measures

No mitigation measures would be required.

Significance After Mitigation

Impacts would be less than significant without mitigation.

- Threshold 2:** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?
- Threshold 3:** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?
- Threshold 4:** If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?
- Threshold 5:** Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Impact WFR-2 THE PROJECT ENVISIONS POTENTIAL FUTURE DEVELOPMENT ON SITES THAT ARE IN OR NEAR MODERATE, HIGH, AND VERY HIGH FHSZs. DEVELOPMENT FACILITATED BY THE PROJECT WOULD EXPOSE PROJECT OCCUPANTS AND STRUCTURES TO WILDFIRE RISKS FOR SITES LOCATED IN OR NEAR SRAS OR VERY HIGH FHSZs. WILDFIRE RISK WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION.

There are approximately 387 acres of Very High FHSZ within the city limits of Ukiah, and approximately 2,670 acres of Very High FHSZ within the city's existing SOI. The proposed SOI and annexation areas would add approximately 880 acres of Very High FHSZ to city limits and its SOI. As shown in Figure 4.14-1, the Very High FHSZ would be primarily located in the hills west of the city, west of the existing Very High FHSZ within city limits.

Development facilitated by Ukiah 2040 would include increased residential densities and building intensities for certain land use designations, compared to existing density and intensity. This EIR identifies a maximum buildout for Ukiah 2040, which is a conservative assumption developed for this analysis and is not meant to be a predictor of future growth. Overall, maximum growth will be dependent on multiple factors, including local economic conditions, market demand, and other financing considerations. The following estimate of growth is a conservative estimate based on the maximum buildout scenario. Development of the project in the maximum buildout scenario is estimated to result in approximately 2,350 housing units and an additional 4,514,820 square feet of commercial areas.

As noted in Impact WFR-1 above, new development within or near High or Very High FHSZs would be limited to the areas in the western hills of the City where the Hillside Residential and Low Density Residential land use designation would be applied. The Hillside Overlay district (-H) is applied to these lands within the western hills and there would be density restrictions in these areas to address fire concerns. As such, any future development would be limited to a low density (generally 1 dwelling unit per acre). In addition, any future development would be required to adhere to the Ukiah City Code, which has adopted the SRA regulations for lands within the City limits located in High or Very High FHSZs, as described in the *Ukiah City Code* subsection in Section 4.14.2, *Regulatory Setting*.

The proposed annexation areas would add additional Very High FHSZ areas to the city. As described in Section 2, *Project Description*, the project proposes to include Annexation Areas A, B and C. Most

of Annexation Area A and all of Annexation Area C would be located in a High or Very High FHSZ; however, most of these Annexations Areas are associated with a Public land use designation and no buildout is expected in these areas. A portion of Annexation Area C is designated as Hillside Residential and could potentially result in development of residences at a low density and would be required to adhere to the same regulations described above. Annexation Area B is not within a FHSZ.

Growth facilitated by the project would occur primarily as infill and redevelopment within the urbanized areas of Ukiah. Therefore, most roads and utility infrastructure required for growth facilitated by the project would be existing or would occur in currently developed areas. However, a small amount of low density development facilitated by the project could occur in FHSZs, and the installation or maintenance of roads and utility lines may exacerbate existing fire risks in the city or its SOI.

The Safety Element of Ukiah 2040 includes proposed goals and policies to related to prevention, minimization, and mitigation of wildfire risks. Applicable goals and policies include the following as well as Policies SAF-5.3, SAF-5.4, and SAF-5.5 identified in Impact WFR-1:

Goal SAF-5: To minimize wildland fire risk to project life and property.

Policy SAF-5.1: Public Facilities Hazard Mitigation. The City shall reduce hazard potential for public facilities located in the Very High Fire Hazard Severity Zone by requiring the incorporation of hazard mitigation measures during planned improvements.

Policy SAF-5.2: Vegetation and Fuel Management. The City shall require that structures located in the Very High Fire Hazard Severity zone maintain the required hazardous vegetation and fuel management specified within the California Fire Code.

Policy SAF-5.5: Fuel Breaks. The City shall prioritize increasing funding for and the maintenance of appropriate fuel breaks, reductions, and pest management in high fire hazard areas to prevent the spread of fire and limit potential damages.

Policy SAF-5.6: Water Supply Infrastructure. The City shall regularly assess the integrity of existing water supply infrastructure and prioritize required system.

Policy SAF-5.7: Fire Code Compliance. The City shall require that all new or significantly renovated structures and facilities within Ukiah comply with local, State, and Federal regulatory standards including the California Building and Fire Codes as well as other applicable fire safety standards.

Policy SAF-5.8: Site Design Standards for Fire Hazard Reduction. The City shall prioritize the maintenance and update of stringent site design standards to reduce potential fire hazard risk.

Policy SAF-5.9: Adequate Water Supply Infrastructure. The City shall prioritize new development in areas with adequate water supply infrastructure.

Proposed goals and policies of the Safety Element would reduce the risk of loss of life, injury, and property loss from wildfires. New construction would also be subject to the California Fire Code, which includes safety measures to minimize the threat of fire, including ignition-resistant construction with exterior walls of noncombustible or ignition resistant material from the surface of the ground to the roof system and sealing any gaps around doors, windows, eaves, and vents to prevent intrusion by flame or embers. Fire sprinklers would be required in residential developments (with some exceptions) pursuant to Ukiah City Code. Construction would also be required to meet

CBC requirements, including CCR Title 24, Part 2, which includes specific requirements related to exterior wildfire exposure. The Board of Forestry, via CCR Title 14, sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and water supply, which help prevent loss of structures or life by reducing wildfire hazards. The codes and regulations would reduce the risk of loss, injury, or death from wildfire for new residential developments facilitated by the project, but not entirely.

Existing codes and regulations and Ukiah 2040 proposed goals and policies cannot fully prevent wildfires from damaging structures or occupants. The project would increase the exposure of new residential development to risk of loss or damage from wildfire, which would be a significant impact. Therefore, Mitigation Measure WFR-1 would be required to reduce the risk of wildfire during project construction for development facilitated by the project. Mitigation Measure WFR-2, which includes development siting considerations, would apply to development facilitated by the project.

Mitigation Measures

WFR-1 Construction Wildfire Risk Reduction

The City shall require the following measures during project construction:

1. Construction activities with potential to ignite wildfires shall be prohibited during red-flag warnings issued by the National Weather Service for the site. Example activities include welding and grinding outside of enclosed buildings.
2. Fire extinguishers shall be available onsite during project construction. Fire extinguishers shall be maintained to function according to manufacturer specifications. Construction personnel shall receive training on the proper methods of using a fire extinguisher.
3. Construction equipment powered by internal combustion engines shall be equipped with spark arresters. The spark arresters shall be maintained pursuant to manufacturer recommendations to ensure adequate performance.

At the City's discretion, additional wildfire risk reduction requirements may be required during construction. The City shall review and approve the project-specific methods to be employed prior to building permit approval.

WFR-2 Project Design Wildfire Risk Reduction

Prior to finalizing site plans, proposed structure locations shall, to the extent feasible given site constraints, be located outside of known landslide-susceptible areas and located at least 50 feet from sloped hillsides. Project landscape plans shall be encouraged to include fire-resistant vegetation native to Mendocino County and/or the local microclimate of the site and prohibit the use of fire-prone species especially non-native, invasive species. Should the project meet the above criteria, no additional measures are necessary. Should the location be within a known landslide area or within 50 feet of a sloped hillside, structural engineering features shall be incorporated into the design of the structure to reduce the risk of damage to the structure from post-fire slope instability resulting in landslides or flooding. These features shall be recommended by a qualified engineer and approved by the City prior to the building permit approval.

Significance After Mitigation

The development that could be facilitated by Ukiah 2040 and located within High or Very High FHSZs would be limited to low density residential. In addition, any of this future development would be required to adhere to the Ukiah City Code, which has adopted the SRA regulations for lands within the City limits located in High or Very High FHSZs, as described in the *Ukiah City Code* subsection in Section 4.14.2, *Regulatory Setting*. Furthermore, with implementation of mitigation measures WFR-1 and WFR-2, the risk of loss of structures and the risk of injury or death due to wildfires would be reduced. These measures would make structures more fire resistant and less vulnerable to loss in the event of a wildfire. These measures would also reduce the potential for construction to inadvertently ignite a wildfire. Considering that future development within high or Very High FHSZs would be limited to low density residential; that the City has adopted the SRA regulations; that future projects in these areas would require discretionary review; and that Mitigation Measures WFR-1 and WFR-2 would be implemented, it is expected that impacts related to wildfire would be less than significant with mitigation.

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