4.18 Wildfire

This section describes the existing conditions, identifies associated regulatory framework, evaluates potential impacts related to wildfire and establishes mitigation measures related to the implementation of the Pacifica Project (project or proposed project). Fire protection services for the project have been addressed in Section 4.13, Public Services. Information in this section was derived from the Fire Response Modeling prepared by Dudek in March 2023 (Appendix O1) and the Evacuation Memorandum prepared by City of Oceanside Deputy Fire Chief in June 2023 (Appendix O2).

4.18.1 Existing Conditions

Wildfire is a continuous threat in Southern California and is particularly concerning in the wildland-urban interface, the geographic area where urban development either abuts or intermingles with wildland or vegetative fuels. During the summer season, dry vegetation, prolonged periods of drought, and Santa Ana wind conditions can combine to increase the risk of wildfires in San Diego County (County).

Fire History

The project area, like all of the County, is subject to seasonal weather conditions that can heighten the likelihood of fire ignition and spread. Fire history is an important component of wildfire analysis. Wildfire history information can provide an understanding of fire frequency, fire type, most vulnerable project areas, and significant ignition sources, amongst others. The California Department of Forestry and Fire Protection (CAL FIRE) maintains the Fire and Resource Assessment Program database, which was used to evaluate the project site's fire history to determine whether large fires have occurred in the project area, and thus the likelihood of future fires. Per the recorded fire history database, the project site has not been subject to wildfire (CAL FIRE 2022). Fires recorded within 10 miles of the project site range from 167 acres (River fire in 2014) to 15,186 acres (Pulgas-Basoline Complex fire in 2014).

Fire Hazard Mapping

CAL FIRE's Fire and Resource Assessment Program database also includes map data documenting areas of significant fire hazards in the state. These maps categorize geographic areas of the state into different Fire Hazard Severity Zones (FHSZs), ranging from moderate to very high. CAL FIRE uses FHSZs to classify anticipated fire-related hazards for the entire state, and includes classifications for State Responsibility Areas, Local Responsibility Areas, and Federal Responsibility Areas. Fire hazard severity classifications take into account vegetation, topography, weather, crown fire production, and ember production and movement. The project site is not within a Very High Fire Hazard Severity Zone (VHFHSZ). The closest VHFHSZ is located approximately 2.9 miles west of the project site (CAL FIRE 2022).

Vegetation Communities and Land Covers

Variations in vegetative cover type and species composition have a direct effect on fire behavior. Some plant communities and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (leaf size, branching patterns), and overall fuel loading.

A critical factor to consider is the dynamic nature of vegetation communities. Fire presence and absence at varying cycles or regimes affect plant community succession. Succession of plant communities, most notably the gradual

conversion of shrublands to grasslands with high frequency fires and grasslands to shrublands with fire exclusion, is highly dependent on the fire regime. Further, biomass and associated fuel loading will increase over time if disturbance or fuel reduction effects are not diligently implemented.

The vegetation types and land covers in the project area were identified during field assessments conducted for the project site. As detailed in Section 4.3, Biological Resources, the project site and perimeter slopes are predominantly composed of non-native, invasive plant species. In total, two vegetation communities/land covers were mapped within the project site: disturbed habitat and urban/developed. The project site is surrounded by existing single-family residential uses and some open space associated with Libby Lake Park to the southwest.

Topography/Terrain

Topography influences fire risk by affecting fire spread rates. Typically, steep terrain results in faster fire spread up-slope and slower spread down-slope. Terrain that forms a funneling effect, such as chimneys, chutes, or saddles on the landscape, can result in especially intense fire behavior, including faster spread and higher intensity. Conversely, flat terrain tends to have little effect on fire spread, resulting in fires that are driven by vegetation and wind. The project site is relatively flat, but the topography slightly rises at the edges of the site as it is bounded by approximately 20- to 30-foot slopes up to existing single-family homes on the north, south, east, and northwest sides of the site.

Climate, Weather, and Wind

In the City of Oceanside, the summers are warm, arid, and clear and the winters are long, cool, and partly cloudy. During summer months (early July through October), the average daily high temperature is above 74°F, and during the cooler, winter months (November through April), the average daily high temperature is below 67°F. The temperature varies throughout the year but is rarely below 38°F or above 83°F. Like much of Southern California, the City experiences seasonal variation in monthly rainfall throughout the year, with the wetter months lasting from November through April.

The project site, like much of Southern California, is influenced by prevailing wind patterns. Prevailing winds are winds that blow from a single direction over a specific area of the Earth. The predominant average hourly wind speed and direction in the City varies throughout the year. The prevailing wind pattern is from the west (onshore), but the presence of the Pacific Ocean causes a diurnal wind pattern known as the land/sea breeze system. During the day, winds are from the west–southwest (sea), and at night winds are from the northeast (land). During the summer season, the diurnal winds may average slightly higher than the winds during the winter season due to greater pressure gradient forces. Surface winds can also be influenced locally by topography and slope variations. The highest wind velocities are associated with downslope, canyon, and Santa Ana winds. The project site does not include topography or slope variations that would create unusual weather conditions, such as high wind velocities, which would lead to increased fire risk. However, the site is subject to seasonally strong winds, such as Santa Ana winds, which can result in periodic extreme fire weather conditions that occur throughout the City.

4.18.2 Regulatory Setting

Federal

National Fire Protection Association Codes, Standards, Practices, and Guides

National Fire Protection Association codes, standards, recommended practices, and guides are developed through a consensus standards development process approved by the American National Standards Institute. This process brings together professionals representing varied viewpoints and interests to achieve consensus on fire and other safety issues. National Fire Protection Association standards are recommended guidelines and nationally accepted good practices in fire protection but are not law or "codes" unless adopted or referenced as such by the California Fire Code (CFC) or local fire agency.

International Fire Code

Created by the International Code Council, the International Fire Code (IFC) addresses a wide array of conditions hazardous to life and property, including fire, explosions, and hazardous materials handling or usage.[1] The IFC places an emphasis on prescriptive and performance-based approaches to fire prevention and fire protection systems. Updated every 3 years, the IFC uses a hazards classification system to determine the appropriate measures to be incorporated to protect life and property (these measures often include construction standards and specialized equipment). The IFC uses a permit system (based on hazard classification) to ensure that required measures are instituted where applicable (International Code Council 2021). The IFC provides recommended guidelines and accepted good practices in fire protection; however, these do not constitute binding laws or codes unless adopted as such or referenced as such by the California Fire Code or the local fire agency.

International Wildland–Urban Interface Code

The International Wildland–Urban Interface Code is published by the International Code Council and is a model code addressing wildfire issues. The International Wildland–Urban Interface Code provides recommended guidelines and accepted good practices in fire protection; however, these do not constitute binding laws or codes unless adopted as such or referenced as such by the California Fire Code or the local fire agency.

Uniform Fire Code

The Uniform Fire Code contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code include fire department access, fire hydrants, automatic storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The code contains specialized technical regulations related to fire and life safety.

[1] The International Fire Code is not a federal regulation, but rather a system of international requirements set by the International Code Council.

State

California Government Code

California Government Code Sections 51175 through 51189 provide guidance for classifying lands in California as fire hazard areas and provide requirements for management of property within those lands. CAL FIRE is responsible for classifying FHSZs based on statewide criteria and makes the information available for public review. Further, local agencies must designate, by ordinance, VHFHSZs within their jurisdiction based on the recommendations of CAL FIRE.

Section 51182 sets forth requirements for maintaining property within fire hazard areas, such as defensible space, vegetative fuels management, and building materials and standards. Among other requirements, defensible space consisting of 100 feet of fuel modification must be maintained on each side of a structure, but not beyond the property line unless findings conclude that the clearing is necessary to significantly reduce the risk of structure ignition in the event of a wildfire. Clearance on adjacent property shall only be conducted following written consent by the adjacent owner. Further, trees must be trimmed from within 10 feet of the outlet of a chimney or stovepipe; vegetation near buildings must be maintained; and roofs of structures must be cleared of vegetative materials. Exemptions may apply for buildings with an exterior constructed entirely of nonflammable materials.

California Fire Code

The CFC is Chapter 9 of Title 24 of the California Code of Regulations. It was created by the California Building Standards Commission and is based on the IFC created by the International Code Council. It is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The CFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The CFC and the California Building Code use a hazards 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 these safety measures are met, the CFC employs a permit system based on hazard classification. The CFC is updated every 3 years. Chapter 11, Article II (Fire Prevention) of the City's Municipal Code provides the City's adopted amendments to the 2019 CFC.

California Department of Forestry and Fire Protection

CAL FIRE is tasked with reducing wildfire-related impacts and enhancing California's resources. CAL FIRE responds to all types of emergencies including wildland fires and residential/commercial structure fires. In addition, CAL FIRE is responsible for the protection of approximately 31 million acres of private land within the state and, at the local level, is responsible for inspecting defensible space around private residences. CAL FIRE is responsible for enforcing State of California fire safety codes included in the California Code of Regulations and the California Public Resources Code.

California Strategic Fire Plan

The 2018 Strategic Fire Plan for California reflects CAL FIRE's focus on (1) fire prevention and suppression activities to protect lives, property, and ecosystem services; and (2) natural resource management to maintain the state's forests as a resilient carbon sink to meet California's climate change goals and to serve as important habitat for adaptation and mitigation. The Strategic Fire Plan for California provides a vision for a natural environment that is more fire resilient; buildings and infrastructure that are more fire resistant; and a society that is more aware of and

responsive to the benefits and threats of wildland fire; all are achieved through local, state, federal, tribal, and private partnerships (CAL FIRE 2018). Plan goals include the following:

1. Identify and evaluate wildland fire hazards and recognize life, property and natural resource assets at risk, including watershed, habitat, social and other values of functioning ecosystems.
2. Facilitate the collaborative development and sharing of all analyses and data collection across all ownerships for consistency in type and kind.
3. Promote and support local land use planning processes as they relate to: (a) protection of life, property, and natural resources from risks associated with wildland fire, and (b) individual landowner objectives and responsibilities.
4. Support and participate in the collaborative development and implementation of local, county and regional plans that address fire protection and landowner objectives.
5. Increase fire prevention awareness, knowledge and actions implemented by individuals and communities to reduce human loss, property damage and impacts to natural resources from wildland fires.
6. Integrate fire and fuels management practices with landowner/land manager priorities across jurisdictions.
7. Determine the level of resources necessary to effectively identify, plan and implement fire prevention using adaptive management strategies.
8. Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.
9. Implement post-fire assessments and programs for the protection of life, property, and natural resource recovery.

California Emergency Services Act

The California Emergency Services Act was adopted to establish the state's roles and responsibilities during human-caused or natural emergencies that result in conditions of disaster and/or extreme peril to life, property, or resources of the state. This act is intended to protect health and safety by preserving the lives and property of the people of the state.

California Natural Disaster Assistance Act

The California Natural Disaster Assistance Act provides financial aid to local agencies to assist in the permanent restoration of public real property, other than facilities used solely for recreational purposes, when such real property has been damaged or destroyed by a natural disaster. The California Natural Disaster Assistance Act is activated after a local declaration of emergency and the California Emergency Management Agency gives concurrence with the local declaration, or after the governor issues a proclamation of a state emergency. Once the act is activated, the local government is eligible for certain types of assistance, depending on the specific declaration or proclamation issued.

California Disaster and Civil Defense Master Mutual Aid Agreement

The California Disaster and Civil Defense Master Mutual Aid Agreement, as provided by the California Emergency Services Act, provides statewide mutual aid between and among local jurisdictions and the state. The statewide mutual aid system exists to ensure that adequate resources, facilities, and other supports are provided to jurisdictions whenever local resources prove to be inadequate for a given situation. Each jurisdiction controls its own personnel and facilities but can give and receive help whenever needed. The Oceanside Fire Department (OFD)

participates in these mutual aid, automatic aid and other agreements with CAL FIRE and surrounding fire departments. In some instances, the closest available resource may come from another fire department. San Diego County is located in Mutual Aid Region 6 of the state system, which also includes Imperial, Riverside, San Bernardino, Inyo, and Mono counties.

Local

San Diego County Emergency Plan

The San Diego County Emergency Plan is a comprehensive emergency management system that provides for a planned response to disaster situations associated with natural disasters, technological incidents, and nuclear defense operations. The plan includes operational concepts relating to various emergency situations, identifies components of the Emergency Management Organization and describes the overall responsibilities for protecting life and property and assuring the overall well-being of the population. The plan also identifies the source of outside support that might be provided (through mutual aid and specific statutory authorities) by other jurisdictions, state and federal agencies, and the private sector.

City of Oceanside General Plan

Public Safety Element

The Public Safety Element identifies hazards, such as earthquakes, fires, and tsunamis, and provides guidance for proper mitigation measures, such as evacuation routes, to ensure safety. Along with long-range policies regarding seismic, flooding, and fire hazards, this element also includes a Public Safety Plan. The Public Safety Plan includes maps of indicating areas that have increased susceptibility to these hazards and relocation routes during emergency evacuations. There are no formal policies within this element that are applicable to the proposed project.

4.18.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to wildfire are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to wildfire would occur if:

1. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:
    a. Substantially impair an adopted emergency response plan or emergency evacuation plan.
    b. 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.
    c. 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.
    d. 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.

4.18.4 Impacts Analysis

Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

The project site is not located within or adjacent to a VHFHSZ (CAL FIRE 2022). There is a Federal Responsibility Area located approximately 1 mile north of the site associated with Marine Corps Base Camp Pendleton, and the nearest VHFHSZ is within the same Local Responsibility Area located approximately 2.9 miles west of the proposed project site (CAL FIRE 2022). As discussed in Section 4.8, Hazards and Hazardous Materials, the project would not conflict with regional or City emergency response plans, and the project site would have adequate emergency access.

The project would provide two access points. The main entrance would be located at the intersection of Monica Circle and Macario Drive, and the second access would be an emergency access located at the terminus of Malaga Drive. As determined in Appendix O1, in the event of an emergency, OFD's Station 5 would have a travel time of approximately 1 minute and 52 seconds throughout 100% of the development, which would fully conform to OFD's 5-minute response time goal.

As explained in the memorandum prepared by the City of Oceanside Deputy Fire Chief (Appendix O2), in the event of a wildfire or other emergency resulting in evacuation the City will notify residents and visitors via a wide variety of sources, ranging from apps for cell tower alerting, to reverse 911 systems for landline phones. Subsequent to the Lilac Fire in 2017, all law and fire agencies in the County of San Diego switched evacuations to a new and more focused process. This process involves detailed maps carried by all emergency response agencies so that evacuation zones can be more precisely identified and communicated. Appendix O2 also concluded that the City of Oceanside is prepared to evacuate the appropriate areas of the City, including the proposed project, in the event of an emergency that necessitates such action. The proposed project would not impact evacuation decisions or the evacuation process (Appendix O2).

The project would not require the full closure of any public or private streets or roadways during construction or operations and would not impede access of emergency vehicles to the project site or any surrounding areas. Further, the project would provide all required emergency access in accordance with the requirements of OFD, as detailed in Section 4.13, Public Services, and Chapter 4.15, Traffic and Circulation. Final site plans for the project would be subject to review by OFD, prior to project development. The project would not substantially impair an adopted emergency response plan or emergency evacuation plan and, therefore, impacts are determined to be **less than significant**.

Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The project site is relatively flat, but the topography slightly rises at the edges of the site as it is bounded by approximately 20- to 30-foot slopes up to existing single-family homes on the north, south, east, and northwest sides of the site. The project site is in an urban and developed area of the City and is not located within or adjacent to an FHSZ. The project site is surrounded by existing development, with the exception of the open space area to the southwest associated with Libby Lake Park. There are no adjacent wildlands to the project site, or other factors, that would exacerbate fire risks. The preliminary site plans and emergency access for the project have been reviewed by OFD and would be in compliance with the applicable fire code. It has been determined that the project would not exacerbate wildfire risks, exposing occupants to pollutants, and therefore, impacts would be **less than significant**.

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?

The project would require the installation of water supply infrastructure and other underground utilities typical of a new residential development. The project would not require installation of new roads, emergency water sources, power lines, or any overhead utility lines. Due to the project location surrounded by existing development and roads, fuel breaks are not required. Project development and associated on- and off-site infrastructure would not exacerbate fire risks. As described previously, the project is not located within or adjacent to an FHSZ. Additionally, these improvements would be constructed within an existing right-of-way or within the project site boundary. The project would not require the installation or maintenance of such infrastructure that would exacerbate fire risk, and therefore, impacts are determined to be **less than significant**.

Would the project 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?

As previously discussed, the project is not located in a FHSZ and risk of wildfire is considered low. Due to the project site location and topography, the project would not be subject to downhill flooding or landslides resulting from a fire in the project area. The project would not 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. Therefore, impacts are determined to be **less than significant**.

4.18.5 Cumulative Analysis

The project site is not located within or adjacent to a VHFHSZ (CAL FIRE 2022). There is a Federal Responsibility Area located approximately 1 mile north of the site associated with Marine Corps Base Camp Pendleton and the nearest VHFHSZ is within the same Local Responsibility Area located approximately 2.9 miles west of the proposed project site (CAL FIRE 2022). As discussed in Section 4.8, Hazards and Hazardous Materials, the project would not conflict with regional or City emergency response plans, and the project site would have adequate emergency access.

Final site plans for the proposed project and all cumulative projects would be subject to review and approval by OFD prior to project development. All cumulative projects would be required to assess wildfire risk at the development site and in the surrounding area and provide mitigation as necessary. As the proposed project would not result in significant impacts related to wildfire, cumulative impacts are determined to be **less than significant**.

4.18.6 Mitigation Measures

No significant impacts related to wildfire were identified; thus, no mitigation measures are required.

4.18.7 Level of Significance After Mitigation

As analyzed above, no significant impacts related to wildfire were identified; thus, no mitigation measures are required. Impacts related to wildfire as a result of project implementation would be **less than significant**.

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