Master Response 1: Wildfire

Several commenters asserted that development of the project site would result in a heightened fire risk due to the increased human presence in the Wildland Urban Interface (WUI) and have raised concerns regarding fire risks due to construction and project operation, safe evacuation in the event of a wildfire, and potential for a fire to spread to off-site areas. This Master Response addresses all the wildfire concerns raised in the comment letters received. Wildfire is addressed in Section 4.14 of the Draft EIR.

Sources of Ignition

The proposed VESP project takes a multilayer approach to preventing and protecting project occupants from wildfires that also benefits the surrounding community. The Draft EIR acknowledges that human activities result in a significant number of fires within California (Draft EIR pp. 4.14-4, 4.14-7,4.14-23, 4.14-26, 4.14-33). Further, the Draft EIR identifies potential ignition sources related to the project such as powerlines, construction, operation and maintenance activities, and increased development in the WUI. The Specific Plan includes a host of Firewise Guidelines, Standards, and Vegetation Management Requirements (VESP Section 4.5) to address these ignition sources. As stated on pages 4.14-24 through 4.14-17 of the Draft EIR, minimizing the risk of ignition within the plan area would not only benefit the project but also provide protection to the surrounding area. To clarify that the project is designed to minimize affecting adjacent areas the analysis in the Draft EIR under Impact 4.14-2 is updated to clarify that this would not only reduce the likelihood that a wildfire would impact the project but also reduce the likelihood of a fire occurring within the project and spreading to surrounding areas. Please see Chapter 3 for the new language.

The City of Chico (City) does not have any policies or ordinances that prohibit development in a fire hazard severity zone nor does the City require developers to exceed code compliance requirements found in the Uniform Building Code, the California Building Code (CBC), and the California Fire Code (CFC). City General Plan policies are identified in the Draft EIR under the Regulatory Setting (Draft EIR p. 4.14-14). General Plan Policy S-4.3 supports the development and implementation of standards and programs to reduce wildfire and review of development and building applications for opportunities to ensure compliance with relevant codes. As discussed on page 4.14-14 of the Draft EIR, the General Plan includes Actions S-4.3.1 through S-4.3.5 which list specific standards for development. The project is consistent with the City's General Plan Policies and the VESP includes Firewise Guidelines, Standards, and Vegetation Management Requirements that exceed existing state fire protection measures.

Powerlines are a significant source of ignitions in California and within the project area, as the Draft EIR acknowledges on page 4.14.5. Powerlines have resulted in fires such as the 2021 Dixie Fire and the 2018 Camp Fire. However, the project would not be increasing the ignition potential associated with the electrical powerlines that extend through the project site. The City requires undergrounding of all new utilities, including the project's electric powerlines, thus facilitating a reduction in the risk of ignitions from contact between electrical lines and tree canopies or other vegetation, per Municipal Code section 19.60.120. This would also reduce wildfire potential to surrounding communities by requiring the project underground overhead powerlines and this source of possible ignition. However, the existing powerlines present on the site would remain aboveground.

As disclosed in Section 4.14 of the Draft EIR starting on page 4.14-23, project construction has a potentially significant risk associated with possible ignitions. Construction activities could exacerbate wildfire risk due to the use of flammable materials tools, and/or equipment capable of generating a spark and igniting a wildfire. However, all construction contractors would be required to adhere to all current regulatory requirements such as Chapter 33, Fire Safety During Construction and Demolition of the CFC. The Draft EIR acknowledges that even with adherence to best management practices (BMPs), code compliance, and VESP Firewise Guidelines there is still a potential for construction-related ignitions. Therefore, mitigation measure WFIRE-1 (Draft EIR p. 4.14-27) requires a Construction Fire Prevention Plan, prepared in coordination with the Chico Fire Department (CFD), prior to any construction activities. The Construction Fire Prevention Plan must include procedures to minimize potential ignition; work restrictions during windy days; training; access to water sources; and an on-site fire awareness coordinator. Adherence to the plan would minimize the potential for construction-related ignition on-site ignitions to occur and potentially impact off site areas.

The project would also require ongoing operation and maintenance activities that could exacerbate the wildfire risk. As determined in the Draft EIR this is a potentially significant impact (Draft EIR p. 4.14-24). Maintenance activities would be required to adhere to Chapter 49 and Chapter 33 of the CFC. While fuel reduction is typically viewed as preventing fires from intruding into a community it can also prevent fires from within the community from spreading to off-site locations. When fuel reduction activities are designed and implemented properly, they not only protect homes but also protect the surrounding environment by either reducing fire intensity and flame lengths as it approaches developed areas or vice versa reducing the spread of an on-site fire to off-site areas. This is because fuel treatments work by redistributing risk on a landscape and altering the interaction between fire, fuels, and weather, including how a fire may spread from one location to another (Cochrane et al., 2012). This can also reduce canopy fires and lower ember cast, such as with the project's approach to fuel reduction by removing ladder fuels in the adjacent open space, as detailed in the VESP's Firewise Guidelines (Cochrane et al., 2012). Research has found that even when just half the landscape is treated and homes are clustered, such as the project, the percentage of houses exposed to fire decreases from 51% to 16% (Braziunas et al., 2021). Fire breaks and fuel reduction would be required around open spaces, as described on pages 4.14-24, 25 in the Draft EIR. By reducing the potential for wildfire in open space areas, there would be a corresponding reduction in potential negative impacts on existing communities that are situated within or at the edge of the greater open space/fuel bed. Vegetation within landscaped areas and around homes would be required to be irrigated to reduce available fuel loads.

Wildfire Protection

The project would adhere to the VESP Firewise Guidelines and require the homeowners' association (HOA) and homeowners to adhere to fuel management requirements. Research has shown that HOA managed communities have increased fire awareness and implemented mitigation practices due to the HOA's oversight ability and mitigation management (Steffey et al., 2020). The VESP HOA would ensure that fuel reduction areas and open space areas remain code compliant and require annual compliance inspections by the CFD. This would aid in preventing ignitions from occurring or turning into significant fires as the fuel reduction areas would remain functional and not degrade over time. Homeowners, while responsible for their own defensible space, would also be subject to HOA oversight through property restrictions and CFD inspection to ensure code compliance. Should the defensible space rules identified by the City or in Public Resources Code (PRC) Section 4291 change, the homeowners would be required to adhere to the updated code. Having fuel modification customized to a project is crucial as the strategic design and placement of fuels treatments can disrupt fire

spread, reduce the intensity, and facilitate fire suppression within a landscape (Braziunas et al., 2021). Fuel treatments are not just isolated to fuel modification. Green barriers consisting of fire restive irrigated species, such as the irrigated landscape with the project and adjacent to homes, can prevent/block surface fire, or crown fires, serve as green ember catchers, and offer fire protection for the area (Wang et al., 2021). This benefit is facilitated by green barriers containing on site ignitions and preventing fires from spreading.

The Draft EIR also includes mitigation measure WFIRE-2 requiring an update to the VESP Guidelines to require the implementation and maintenance of fuel treatments along roadways and any trails proposed for use by fire apparatus. All habitable structures would also be required to be within 150 feet of a fire apparatus road. Roadside fuel reduction would serve as an ignition management tool to prevent vehicle fires from occurring on the project site. If a vehicle were to cause a spark or a fire on site it is unlikely it would spread outside the project area due to the adjacent fuel modification, landscape requirements, and ignition resistant construction. Placing habitable structures within 150 feet of fire apparatus access roads combined with the VESP Firewise Guidelines road requirements, such as rolled curbs and width to accommodate a Type 3 engine, greatly increases firefighter access to an area. This enhances the ability of fire personnel to access defensible space and increases their ability to tactically and safely respond to a fire (Warziniack et al., 2019). This increased ability to respond is not only to improve tactical response to a structural fire or a fire within the community but also a fire in the surrounding lands. The ability for fire responders to access a fire could be the difference between a small vegetation fire or a full wildfire event. Structural fire ignitions are similar in that fast responses will reduce the fire's ability to spread from the room of origin and limit the overall ability of a structural fire to result in a whole home loss, which would be the primary ember producing "fuel" within a new development. Automatic fire sprinklers are required by state law and would also greatly reduce the likelihood of structure fire spread. These systems have been shown to contain interior fires to the room of origin and begin the process of fire suppression before firefighters arrive and can prevent a structure fire from spreading into surrounding homes or wildland areas (NFPA 2021).

Wildfire Risks

Comments also raised concerns regarding increased development in the WUI and the potential to exacerbate wildfire risk. The Draft EIR acknowledges and discloses that the project site is within a mapped fire hazard severity zone and acknowledges that communities adjacent to the WUI areas are at a higher risk for wildfire occurrence. As described on page 4.14-2, the project site is currently within a State Responsibility Area and is designated by the California Department of Forestry and Fire Protection (CAL FIRE) as a Moderate fire hazard area. The project site is currently under the jurisdiction of CAL FIRE but If the project is approved and the site annexed into the City it would be folded into the jurisdiction of the CFD. The Draft EIR also acknowledges that there is an existing threat associated with overhead powerlines adjacent to Honey Run Road and at the intersection of Skyway. The Draft EIR describes the fire history in the area and occurrences of fires on page 4.14-7. As noted, Butte County has experienced a 25% increase in fire occurrence including the 2018 Camp Fire. Further, as discussed under Impact 4.14-2 (Draft EIR pp.4.14-22 through 4.14-27), the Draft EIR identifies and discloses potentially significant risks associated with the underlying existing conditions, and future construction, operations and maintenance of new development that could result in a heightened wildfire risk for the area.

As discussed above, the project is required to provide for a level of planning, ignition resistant construction, site access, water availability, fuel modification, and construction materials and methods that have been developed specifically to allow fire safe development within the WUI areas. As described above, the project, along with mitigation included in the Draft EIR, has taken considerable measures to provide ignition

management and limit the possibility of an on-site fire spreading to off-site communities associated with construction activities as well as operation and maintenance. As a result, the potential fire risk to existing surrounding residents in the area is not expected to increase and the robust fire protection system that protects the proposed project's structures, future residents, and property, would also minimize the potential for an on-site fire to spread to off-site vegetation or structures. The VESP includes Firewise principles that include education and outreach that raises fire awareness and promotes preparedness among its residents, employees, and visitors and meets the intent of the Firewise USA program to create fire adapted communities. By increasing fire awareness in the community this also limits the potential for occupants to cause an accidental ignition and increases community oversight and vigilance.

Developing in areas with existing fire hazards does not automatically equate to increased wildfire risk. The dynamic between human activities and fire frequencies is more complex than simply concluding people living in WUI areas will cause fires (Fox et al., 2018). Research has demonstrated that communities, such as the proposed project, with coherent land use planning and hazard mitigation strategies, can be resistant to natural disasters, recover guickly, and last for many years (Burby et al., 2000; Zhou, 2013). Land use planning and ignition prevention represent the most effective long-term solutions (Syphard et al., 2017). This is because when a wildfire is planned for and integrated into community development it has the dual effect of not only creating a community that can withstand a fire but prevent one which also offers protection to surrounding communities. The requirements and recommendations for the project not only meet fire safety, building design elements, infrastructure, fuel management/modification, and landscaping recommendations of applicable codes, but the project has been designed specifically for the proposed construction of structures within a wildfire severity zone. The fire protection features, both required and those offered by the project provide a reasonable level of assurance that would reduce the likelihood that buildings would ignite due to embers and that the risk of damage to buildings would be minimized (Gorte, 2011; Kolden & Henson, 2019; Manzello et al., 2011; Syphard et al., 2017; Zhou, 2013), which in turn would reduce the likelihood of the fire spreading to an on site or off-site neighborhood. The project features work in tandem to substantially reduce fire risk on a landscape through alteration of the probability, timing of burning, and potential wildfire size (Cochrane et al., 2012).

Other wildfire risks raised by commenters include air quality concerns and effects on air quality due to air pollutants from heavy metals and other toxics released when buildings are burned. Wildfire smoke is comprised of a mixture of gaseous pollutants (e.g., CO), hazardous air pollutants (HAPs) (e.g., polycyclic aromatic hydrocarbons [PAHs]), water vapor, and particulate matter (e.g., PM₁₀ and PM_{2.5}). Particle matter represents the main component of wildfire smoke and the principal health threat. PM_{2.5} is a complex mixture of solids and aerosols that can contain a myriad of chemical compounds, including metals, organic and elemental carbon, potassium, organic matter and geologic material, and potentially ammonium nitrate and ammonium sulfate.

A number of adverse health effects have been associated with exposure to both PM_{2.5} and PM₁₀. For PM_{2.5}, short-term exposures (up to 24-hour duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. Of all the common air pollutants, PM_{2.5} is associated with the greatest proportion of adverse health effects related to air pollution, both in the United States and worldwide based on the World Health Organization's Global Burden of Disease Project. Short-term exposures to PM₁₀ have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits (CARB 2017).

Long-term exposure (months to years) to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. The effects of long-term exposure to PM_{10} are less clear, although several studies suggest a link between long-term PM_{10} exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer (CARB 2017).

Metal concentrations can also peak as a result of wildfires, particularly lead (Pb). Lead in the atmosphere occurs as particulate matter. Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient (IQ) performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

As previously discussed, wildfires can also burn structures, buildings, and vehicles. In a long-term study of U.S. firefighters, investigators reported an excess of lung, digestive, and urinary cancers, and a rare cancer of the lung - mesothelioma (associated with asbestos exposure). Recently, the investigators reported excess leukemia and excess chronic obstructive pulmonary disease (COPD)-related deaths associated with the amount of time spent at fires (Daniels et al 2020). Further, among the many compounds present in structures are flame retardants, commonly used in consumer products, such as furniture, textiles, building materials, and electronics. Phosphorus flame retardants has shown negative hormonal effects in laboratory tests are associated with increased hyperactivity in children (CARB 2021).

The post-development condition of the project area would diminish the ability of a wildfire to spread and reduce adverse health effects resulting from wildfires. The proposed project's landscaped and irrigated areas, as well as the paved roadways and ignition-resistant structures, would result in reduced fire intensity and spread rates around the project area, creating defensible space for firefighters. Additionally, Fire Station 4 located at 2405 Notre Dame Boulevard is the closest fire station to the project site, which is located less than two miles west. CFD crew staffed at Fire Station 4 are able to access the site quickly from Notre Dame Boulevard to Skyway Road. Fire Station 4 possesses a Type III Wildland Engine, specifically designed to fight fires in the urban-wildland interface which would limit the spread of wildfires. Furthermore, modern infrastructure and the latest ignition-resistant construction methods and materials would also be used. All structures are required to include interior, automatic fire sprinklers, consistent with the fire codes.

Project-level thresholds of significance for criteria pollutants are used to help determine whether a project's individual emissions would have a cumulatively considerable contribution on air quality. If a project's emissions would exceed the BCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant. The Draft EIR evaluated the proposed project's cumulative air quality impact in Section 4.2 Air Quality and concluded that the project's contribution to the cumulative impact would be considerable resulting in a significant contribution.

Therefore, as described in the analysis above and included in the Draft EIR the project adequately assesses and discloses how the project has been designed and will be managed to decrease wildfire potential beyond the project's area boundaries.

Public Safety and Evacuation

Multiple commenters have also raised concerns regarding the threat to public safety and public infrastructure and have questioned whether or not the project's evacuation plans and existing safety plans would be adequate.

The project site is located along an identified evacuation route for both the City and County. As indicated in the Draft EIR the project would provide two primary ingress and egress access points on Skyway and E. 20th Street, with additional emergency access via the Steve Harrison Memorial Bike Path. Multiple points of access would aid in the event of a wildfire or other emergency to safely evacuate residents by decreasing the number of residents at each access point and providing multiple options in the event an access is unusable. In addition, the project applicant is preparing a project-specific Emergency Evacuation Plan to provide further information to project residents in the event emergency evacuation is required. The access provided by the project exceeds code compliance and includes features such as road widths that would accommodate a Type 3 Engine, rolled curbed access points to open space areas, and minimized barriers along trails and bike paths to prevent impeded ingress or egress of emergency vehicles. Research has shown fires within the WUI are often due to structure ignition issues and the best mitigation is to reduce the structure's likelihood of ignition (Zhou 2013). To address the potential for structure fires, the VESP Firewise Guidelines require all structures to be constructed of ignition-resistant materials and include automatic fire sprinklers. Automatic fire sprinklers have been shown to reduce impacts on public infrastructure such as a fire response by successfully containing structure fires within the point of origin and preventing further spread within the home to adjacent homes (NFPA 2021). Project occupants would also be provided with information regarding Firewise Guidelines, procedures, and practices, wildfire preparedness, and evacuation procedures. A project-specific evacuation plan would also be prepared, consistent with City of Chico and Butte County evacuation procedures and inclusive of evacuation specific education. The project also includes provisions for safety zones and on-site shelter-in-place areas in the event that evacuation is impossible. Further, as previously described, the project provides defensible space not only to reduce the likelihood of ignition but to also provide an area for firefighters to respond and engage a fire strategically and safely which increases the likelihood of structure survival (Syphard et al., 2014; Warziniack et al., 2019). The features, as described above, work in tandem to mitigate the risk of fire occurrence and thus reduce impacts on public infrastructure as well.

The project would fall under the protection of CFD upon approval and annexation and the CFD would provide the first response. The CFD maintains mutual-aid agreements with Butte County and CAL FIRE in the area. The nearest fire station is within 2 miles of the site and the project is consistent with the response time target of 5 and half minutes or less for at least 90% of fire emergency response calls in urbanized areas, as identified in the Chico General Plan Action S-4.1.1. The Butte County 2030 General Plan accounted for population growth in the incorporated and unincorporated areas and determined that by implementing General Plan policies there would be adequate emergency response capacity to support increased development (Butte County 2012). Further, per the City's General Plan, the City's existing standards provide for fire safety by requiring adequate access, fire flows, fire suppression techniques, and other facilities to maintain an appropriate level of fire protection as set forth in the CBC, the CFC, and the California Residential Code. Additionally, the project would be required to pay fees for capital improvements that would support the creation of a new fire station or services should it be required. Due to both the decreased risk of site-based fire spreading rapidly throughout the project site, and the close proximity of the nearest CFD fire station to respond to fires on site, the need for immediate emergency evacuations is decreased.

As discussed under Impact, 4.14-1 starting on page 4.14-21 and above, during buildout of the plan area over the next 20+ years, coordination with the CFD, Chico Police Department, and the California Highway Patrol would be initiated to ensure emergency vehicle access is not impaired along local roadways and is maintained in areas under construction. Additionally, Butte County is planning to develop a Multi-County Traffic Plan in order to address the existing problem related to traffic congestion during emergency events (Butte County 2019). The Multi-County Traffic Plan is expected to be completed in 2025 and includes modeling traffic across multiple adjacent counties to determine the best traffic flows during major emergencies. A subsequent plan would be developed that identifies critical traffic flow obstructions and recommends solutions to remedy gridlock locations (Butte County 2019). If approved the project would fall under the above-mentioned plans.

It is within the City and County's jurisdictional authority to establish a framework for implementing wellcoordinated evacuations. Large-scale evacuations are complex, multijurisdictional efforts that require coordination between many agencies and organizations. Emergency services and other public safety organizations play key roles in ensuring that an evacuation is effective, efficient, and safe. Evacuation during a wildfire is not necessarily directed by the fire agency, except in specific areas where fire personnel may enact evacuations on the scene. The Butte County Sheriff's Department, California Highway Patrol, Chico Police and Fire and other cooperating law enforcement agencies have primary responsibility for evacuations. These agencies work closely within the unified Incident Commander system, with the County's Office of Emergency Services, and responding fire department personnel who assess fire behavior and spread, which should ultimately guide evacuation decisions. To that end, Butte County Fire, CFD, law enforcement, City Public Works, Planning, Emergency Services Departments, and the California Department of Transportation (Caltrans), amongst others, have worked together on a County pre-fire mitigation task force to address wildland fire evacuation planning for Butte County. Butte County has also taken steps to identify and learn from the evacuations during the 2018 Camp Fire and raise evacuation awareness in the County (Butte County, 2021; Butte County 2020).

Based on the analysis above and the analysis included in the Draft EIR, the potential threat associated with wildfire to public safety would not result in a significant increase in wildfire risk or other circumstances that public infrastructure, services, and regional evacuation plans are unable to accommodate. The project's impact on existing emergency response plans or evacuation plans remains less than significant.

Ignition Resistant Construction and Building Codes

Multiple commenters have also raised concern over whether ignition-resistant construction is sufficient and effective in preventing structural ignition. Additionally, some commenters have questioned whether mitigation measure WFIRE-2 is adequate and indicated that compliance with fire codes has not shown to improve fire safety or ignition reduction. However, there is evidence that ignition resistant construction and code compliance do both.

The likelihood of home ignition is principally determined by the home ignition zone and effective fire protection measures (Calkin et al., 2014). Additionally, structural characteristics play a large role in determining whether a home burns (Gorte 2011). The project would be required to meet the current CFC and CBC requirements that are in place at the time, which are effective in minimizing ignition of homes during a wildfire event. The CFC and CBC, specifically Chapter 7A of the CBC, include specific requirements for building materials and are regularly updated and performance tested, in order to reduce the likelihood of home ignition (ICC 2021). Ensuring homes are designed to minimize sources of ignition not only reduces the risk for individual homeowners but also the risk of wildfire across the landscape (Mockrin et al., 2020). Preventing home ignition in hazardous locations can result in reductions in further fire spread and is achievable in the WUI (Maranghides

& Mell, 2012). Research has found that structural characteristics, especially roofing, play a significant role in reducing a structure's vulnerability to fire and the likelihood of burning (Gorte, 2011; Kolden & Henson, 2019; Manzello et al., 2011; Syphard et al., 2017; Zhou, 2013). The project's compliance with the CFC and CBC, designed to minimize ignition, ensures the structural characteristics of the project buildings greatly reduce their vulnerability to fire. As previously discussed, the project's roadside fuel reduction would serve as ignition management against vehicle fires and placing structures within 150 feet of fire access roads greatly increases fire fighter access to an area increasing their ability to respond to a fire.

The Draft EIR includes mitigation measure WFIRE-2, which requires the VESP Firewise Guidelines be updated to include implementation of fuel treatments along all project roads and any trails proposed for fire apparatus use measuring 20 feet in width, locating all habitable structures within 150 feet of a fire apparatus access road, and ensuring that building materials and construction for all structures are in compliance with CFC Chapter 49, Section 4905 for all buildings, not just residents located in the WUI perimeter lots. CFC Chapter 49, Section 4905 requires compliance with the wildfire protection build construction requirements detailed in the CBC in Chapter 7A, California Residential Code, Section R337, and California Referenced Standards Code Chapter 12-7A. Therefore, all buildings in the VESP would meet Chapter 7A compliance, not just the perimeter buildings adjacent to open space. This would exceed the current building requirements for a moderate fire hazard area. Further, it is anticipated that CAL FIRE will be updating the requirements for development in fire hazard severity zones and require Chapter 7A compliance in all mapped fire hazard areas.

There is a comment that references a 2021 Study by Knapp et al. which found that 56% of the homes that burned in the 2018 Camp Fire were built during or after 2008. The comment then states that because there was no significant difference in survival of buildings between 1997-2007 and 2008-2018 compliance with fire codes have not shown an improvement in fire safety or ignition reduction. However, this is not an accurate representation of the study and misconstrues what the study examined and concluded. In the Town of Paradise over 86% of homes were built before 1990, and of those homes, only 11.6% of them survived the 2018 Camp Fire (Knapp et al., 2021). Meaning that that Town was significantly comprised of homes that were likely not built with ignition resistant materials. Prior to 1997 there were no consistent fire codes addressing ignition resistance construction material and methods. Homes built before 1990 (86% of the homes in Paradise) were not required to be built with ignition resistant materials and, as evident by the study, were significantly susceptible to home ignition impacts (Knapp et al., 2021). The first iterations of the fire-based building code requirements were issued in the mid-90s after the 1991 Oakland Firestorm, and predominantly focused on the banning of wood shake shingles and were effective in protecting communities such as Serrano Heights in southern California (Orange County Fire Authority, 2008). This fire code would later serve as the basis for the development of Chapter 7A of the CBC. Compared to the survival rate of 11.6% for pre-1990 homes, survival increased to 34.3% for homes that were built after the first iteration of the fire and building code requirements (1997-2007), and to 43% for homes built in compliance with Chapter 7A codes (2008-2018) (Knapp et al., 2021). While the research did find this trend regarding the survivability of homes, it is correct that the study did not find a significant difference when comparing the homes that were built between the two eras of fire and building codes (Knapp et al., 2021). However, the study also acknowledges that the sample size is very small (only 24% of homes were built from 2007-2018) and a larger sample size may produce different or significant results (Knapp et al., 2021). The study also examined the overall difference between homes that were built prior to significant fire and building codes (before 1997) to homes that were built after the adoption of fire and building codes (1997 – 2018), it was found that homes built between 1997 and 2018 were significantly more likely to survive than homes build prior to 1997 when fire codes were limited (Knapp et al., 2021).

The research does demonstrate that building codes make a significant difference in the likelihood of structural survivability in a wildfire event. Further, the study concludes that it is still possible to build and maintain buildings that have a high probability of surviving a worst-case scenario type of wildfire and that survivability is high when all components of risk (fuels, embers, and home ignitability) is sufficiently mitigated (Knapp et al., 2021). In the Knapp study this was a major factor in home ignitions as structures of varying age were in close proximity and those built prior to compliance with fire codes were significantly more likely to burn and spread to neighboring structures. However, the homes built as part of the VESP would have a very different composition from homes in Paradise. All homes would be Chapter 7A compliant which includes building materials that address home ignition through prevention of radiant heat impacts, convection, and ember intrusion. Since all homes would be complaint with Chapter 7A it would also reduce the likelihood that homes would be able to act as fuel and overcome fire protection features in adjacent structures. VESP Firewise Guidelines would also address adjacent wildland fuel, home ignition zones, and provide regular maintenance and enforceability of all fire protection features through the HOA.

Some comments also assert that the primary approach to minimize wildfire risk should be avoiding placing human infrastructure in high-fire prone areas and that developers should go above and beyond existing code requirements. In addition, one commenter states that defensible space is most effective within 5 to 30 feet of structures and the project's defensible space within 20-30 feet of structures has not been found effective in reducing ignition risk. The commenter goes on to state that defensible space is most effective in combination with ember-resistant vents and roofing. However, as previously discussed, not only is the project subject to comply with all code requirements and General Plan policies, but the project also includes Firewise Guidelines that exceed current building code requirements. As described on page 4.14-19 of the Draft EIR, the defensible space standard referenced in this comment would apply to the outer perimeter of a subdivision along the WUI and would be in addition to the defensible space required around homes and other structures within individual lots. The Draft EIR further describes that the areas surrounding the homes would be required to be landscaped with drought tolerant and fire resistive plants (Draft EIR p. 4.14-24). Contrary to the commenter's statement, the type of fuel modification proposed by the project has been proven effective in reducing ignition risk as explained above. Additionally, the project includes defensible space and fuel reduction methods, as well as code compliant ignition resistant construction which requires ember-resistant vents and roofing, per Chapter 7A of the CBC. Thus, as commenters have suggested, the combination of defensible space and ember-resistant vents and roofing, which are included in the project, would provide highly effective ignition resistance.

Therefore, as discussed above and throughout this Master Response, compliance with the most current fire and building codes is an effective means of preventing home ignition.

Effectiveness of Fire Resistance Measures in Residential Communities

As discussed above, preventing home ignition in hazardous locations can result in reductions in further fire spread (Maranghides & Mell, 2012). There have also been examples of communities that were designed with fire in mind or took steps to promote their ignition resistance and were successful in resisting fire. The unincorporated community of Montecito is classified by CAL FIRE as a very high fire hazard severity zone (VHFHSZ) and has significant fire history including home loss. However, when the 2017 Thomas fire in Santa Barbara County, which consumed over 1,000 homes during high wind events, reached Montecito the results were different (Kolden & Henson, 2019). Montecito experienced minimal damage and was largely passed over by the fire (Kolden & Henson, 2019). The reason was that two decades prior to the Thomas Fire the community took significant measures to reduce their vulnerability and increase their adaptive capacity through place-based reduction strategies (Kolden & Henson, 2019). These strategies focused on reducing

structural ignition potential, fire-resistant materials, structural modifications, increasing defensible space, fire scaping, and developing a fire protection code (Kolden & Henson, 2019). Section 4.5 of the VESP *Firewise Guidelines, Standards & Vegetation Management Requirements* uses similar strategies to establish an ignition-resistant community.

Another fire, the 2007 Witch Creek fire, was one of the most destructive fires in California's history and destroyed thousands of homes in San Diego County (Mutch et al., 2011). However, after the 1990 Paint Fire in Santa Barbara and the 1991 Oakland Hills Tunnel Fire the Ranch Santa Fe community (in San Diego County) started efforts to become adaptive to a very high fire hazard environment (Mutch et al., 2011). The community implemented fire codes, developed restricted defensible space rules, home hardening measures, and vegetation restrictions; all of which were maintained and enforced by the HOA (Mutch et al., 2011). As a result, when the Witch Creek fire spread to Rancho Santa Fe, in the five communities that adopted this approach no homes were lost, versus the older communities which were heavily impacted (Mutch et al., 2011). The Casino Ridge neighborhood in Yorba Linda had implemented ignition resistant construction and fire reduction strategies and when the 2008 Freeway Complex fire threatened the community it faired significantly better than the older surrounding communities (Orange County Fire Authority 2008).

In 2007, Serrano Heights in Anaheim Hills was threatened by a fire at Windy Ridge. Serrano Heights had implemented prevention and mitigation strategies such as fuel modification and structural hardening which saved the homes and aided firefighters in attacking the fire and better allocate resources as the "fire-hardened" structures were defensible (FEMA, n.d.). The only home to sustain significant damage was constructed without ignition resistant materials and had a wood shake roof (FEMA, n.d.). Having hardened homes that were defensible allowed for firefighters to safety engage with the fire and allowed for structures to have passive protection from the fire.

In summary, the evidence clearly supports ignition-resistant structures fare much better in a wildfire than those structures built without consideration of potential wildfire.

Exterior Sprinklers

There was a suggestion that exterior sprinklers be provided to further minimize the spread of wildfire. However, external sprinklers are not required by state law nor recognized by the National Fire Prevention Association as an approved fire protection system for structures. Further, exterior fire sprinklers require a sufficient water supply and pressure that may need to last for up to eight hours (NFPA, n.d). This would potentially impact water pressure and fire flow during a wildfire event and in turn affect critical water availability and fire flow for firefighters to utilize. The effectiveness of exterior fire sprinklers has not been proven and due to inherent limitations makes their use inappropriate when considering factors such as water requirements, high wind events, and methods for activation (NFPA, n.d). Therefore, exterior fire sprinklers are not recommended as a replacement nor as an addition for other proven approaches such as fuel reduction and the use of fire/ember resistant ignition building materials and design due to their potential to substantially impact the effectiveness of firefighting capabilities (NFPA, n.d).

Post Fire Ecologist

Commenters have also questioned the adequacy of mitigation measure WFIRE-3 because it does not state a requirement for a post-fire ecologist. In order to conduct a post-fire assessment, fire engineers would need to be on site immediately following a fire for safety purposes and to determine the level of damage and subsequent work required. Additionally, post-fire assessments are often supported by a federal Burned Area

Emergency Response Team (BAER) or a state Watershed Emergency Response Team (WERT) which can include fire ecologists, biologists, hydrologists, geologists, etc. Post-fire assessments would occur in coordination with CFD which may recommend the inclusion of a fire ecologist. Per the mitigation measure identified in the Draft EIR, the geologist would identify the risk and recommendations to address that risk. It would be the responsibility of the City to determine what work is needed. The mitigation has been revised to require a fire ecologist also be consulted, see Chapter 3, Changes to the Draft EIR, for the revised language.

Prescribed Burns

One commenter asserted that in order to build in a wildfire zone prescribed burning must be incorporated as an element of successful planning. While prescribed burning is an effective wildfire management tool it is not an appropriate use in a planned community. Prescribed burns must be executed by fire managers and agencies with specific training in order to execute a burn safely and appropriately for the ecological environment. Ill-prescribed burns can be detrimental to ecosystems and result in significant wildfire risk. Even when prescribed burns are conducted by fire agencies with training they can still escape and create an unintended wildfire, such as the recent Hermits Peak and Calf Canyon wildfires in New Mexico (Gabbert 2022a). These two fires were initially prescribed fires that were not properly extinguished and have burned over half a million acres (Gabbert 2022a). As a result, the U.S. Forest Service, an agency with extensive prescribed burning experience, has paused all prescribed fire operations in order to review the incidents (Gabbert 2022b). While prescribed fire can provide ecological benefit there are still risk associated with it and it is not practical nor advisable to assert that housing developments should be responsible for prescribed burning and include it in their long-term operations plan. Ultimately, it would up to Butte County Fire, CAL FIRE, and CFD to determine if a prescribed burn would provide ecological benefit, fuels reduction, and not present a public safety risk.

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Master Response 2: Butte County Meadowfoam

Several commenters noted discrepancies between EIR figures and text descriptions of proposed preserve areas surrounding Butte County meadowfoam (BCM) and wooly meadowfoam occurrences. Commenters also requested additional detail be provided regarding management, monitoring and funding of the meadowfoam preserves and how project proponents would ensure that the existing populations would be protected from indirect effects of surrounding development and public access to open space areas. Finally, commenters noted that the most recent BCM surveys were conducted in 2018 and requested new surveys be conducted.

BCM Figures and Preserve Size

Regarding the graphical presentation of the BCM preserves, the commenters are correct that the preserve area shown on Figure 2-3 on page 2-11 and Figure 4.3-4 on page 4.3-25 in the Draft EIR do not represent the 250-foot buffer from BCM populations that is described in the Draft EIR. These figures have been revised to reflect a minimum 250-foot buffer area from all mapped BCM populations and are provided in Chapter 3, Changes to the Draft EIR. However, these figures remain conceptual representations of the final preserve boundaries, which would be determined through formal Endangered Species Act (ESA) consultation with the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW). CDFW suggested in its comment letter (see Letter 6) that the relatively small preserves proposed for protection of BCM may not be effective. It is true that when all else is equal, a larger preserve would better protect preserved species from indirect effects of surrounding development and human presence. However, the effectiveness of smaller preserves is dependent on the particular site and species involved. There are existing BCM preserves in the City of Chico that are small and adjacent to extensive urban development that continue to maintain healthy BCM populations. For instance, the Doe Mill-Schmidbauer Preserve adjacent to the project site and E. 20th Street is approximately 15 acres and maintains a significant BCM population with minimal buffers and no active management. According to Appendix D-2 of the Stonegate EIR, a total of 8.164 BCM were surveyed on the Doe Mill-Schmidbauer Preserve in 2018, 25 years after the City assumed fee title to the parcel. The preserve is protected by perimeter fencing and has simply been left alone over the years. BCM populations have also persisted for several years in roadside drainages in the City despite the effects of roadway runoff and the potential effects from being driven over by vehicles and the complete lack of a preserve or other management tools. Management required to maintain suitable conditions for BCM is modest, and does not pose the same challenges that can occur with more intensive management efforts at smaller sized preserves (e.g., access for equipment or grazing livestock).

Site conditions on the project site are unique though in that the naturally thin soils may not result in the buildup of thatch or influx of ants or other species that may be more problematic on richer soils. With the population of BCM on this site being so small and isolated, with a naturally small genetic pool it is difficult to guarantee a preserve or any adaptive management methods that could prevent "long-term impacts and potential extirpation of BCM" due to possible genetic bottlenecks and potential effects of climate change which cannot be controlled. For reference to the potential suitability of small preserves providing adequate protection of BCM populations, the City prepared a Plan for the Conservation of Butte County Meadowfoam by Jim Jokerst in 1989 which identified the following objectives for individual BCM preserves:

- Create individual preserves of at least 10 acres in size.
- Include in the preserve the upslope watershed area that contributes runoff to sites occupied by BCM.

- Incorporate into the preserve a 200-foot-wide buffer that extends beyond the watershed boundary. The 200-foot width can be decreased where the BCM preserve is bordered by an existing creek, canal, open space easement, park, or road.
- A seed bank for each BCM population should be developed.

In that plan, Jokerst identified delineating the watershed of BCM as being crucial. His method, although stating it was limited in scope, was to visit the site in winter to observe drainage/runoff patterns and combine this with fine scale topo/contours to determine the zone of hydrological influence on a preserved BCM population. This approach is currently proposed. This site-specific exercise is expected to occur during USFWS permitting, as noted in mitigation measure BIO-1. Indirect effects to off-site BCM preserves on the adjacent Stonegate site would not occur because, as the Draft EIR states, they are hydrologically separated from the project site (Draft EIR p. 4.3-50). The project site does drain toward the Stonegate property; however, the water enters a ditch that is below the elevation of the vernal swales and pools within the Stonegate BCM preserve and thus runoff from the project site could not enter the BCM habitat area of the preserve and would not cause direct or indirect effects to BCM populations.

Preserve Management

Various commenters requested that the EIR provide more detail regarding BCM preserve management, monitoring, and funding, as well as performance standards for the preserves that must be met. Various commenters also asserted that the lack of these details, as well as details for protection of Swainson's hawk as part of mitigation measure BIO-4 and protection of bats as part of mitigation measure BIO-5, constituted deferral of required mitigation in a manner not allowed under CEQA. Mitigation measure BIO-1 in the Draft EIR does state that the VESP Habitat Mitigation and Monitoring Plan would include, at a minimum, "management techniques to be used on the preserves; monitoring methods and frequencies to detect changes in Butte County Meadowfoam and allow for adaptive management; and a funding strategy to ensure that prescribed monitoring and management would be implemented in perpetuity to ensure efficacy of the preserves" (Draft EIR p. 4.3-54). Mitigation measure BIO-1 further states, "Management methods shall include controls on introduction and spread of invasive plant species, and requirements for fencing to control public access and pet entry into preserves". The mitigation gives the public and decision-makers a clear picture of what the specific plan and mitigation require in terms of avoiding meadowfoam habitat.

Importantly, as noted in the Draft EIR on page 4.3-34, the project must also obtain permits and authorizations from state and federal agencies for stream crossings and wetland impacts, and those permitting processes will involve formal Endangered Species Act clearances from the USFWS and CDFW. With USFWS typically in the leading role, the project biologist is required to provide detailed documentation based on years of survey data and identify all the details for a given preserve area deemed necessary by the resource agency. Mitigation measure BIO-1 affords *proper* deference to these subsequent permitting processes by describing the basic elements of the proposed avoidance strategy (establishing a wetland preserve around the resource) and leaving the precise details for the subject-matter experts at resource agencies to specify. See Response to Comment 52- 8 for more information about preserve creation and resource agency permitting processes.

However, additional detail has nonetheless been provided in mitigation measure BIO-1 on page 4.3-54 and mitigation measure BIO-4 and BIO-5 on page 4.3.-56 of the Draft EIR (see Chapter 3, Changes to the Draft EIR), including performance standards that must be met and assurance that the mitigation measure is enforceable through a legally binding instrument. Because no meadowfoam habitat restoration or creation activities are anticipated (the strategy is to simply avoid the resources), the Draft EIR revisions also clarify that the future

plan needed under mitigation measure BIO-1 is simply an "Operations Management Plan" as opposed to a "Habitat Mitigation and Monitoring Plan." These additional details ensure that mitigation measure BIO-1 meets the standard set by the courts regarding acceptable deferral of detailed mitigation: "(W)hen a public agency has evaluated the potentially significant impacts of a project and has identified measures that will mitigate those impacts,' and has committed to mitigating those impacts, the agency may defer precisely how mitigation will be achieved under the identified measures pending further study." (Oakland Heritage Alliance v. City of Oakland (2011) 195 Cal.App.4th 884, citing California Native Plant Society v. City of Rancho Cordova (2010) 172 Cal.App.4th 603.)

Timing and Age of Rare Plant Surveys

Regarding the age of the BCM and other rare plant surveys, revised Draft EIR Figure 4.3-4 references the 2008, 2010, 2016 and 2017 survey dates. Gallaway biologists have been conducting surveys for BCM at the site since 2006, and BCM was first identified on the site in 2008 in the 3rd year of site botanical surveys. Therefore, the Draft EIR references 4 years of BCM surveys mapping the population size over a variety of conditions/rain years (some above average, some drought), which exceeds the typical requirement of 2 years of surveys to account for population variability. It is typical for agencies to consider rare plant surveys only valid for 2 years. However, for these plant populations with limited mobility it is reasonable to conclude that the population extent has not changed substantially, considering there have been so many surveys conducted over different years and they all demonstrate a similar footprint and that the plants occur within the same occupied swales. The statement from CDFW that the botanical surveys were "performed in conditions that do not maximize detection" is not accurate. BCM population sizes are well known to be variable within a specific microhabitat, but over 4 years of surveys, the variability should be considered well documented – at least clearly demonstrating the limits of the occupied habitat. Further, there is no evidence based on surveys that BCM populations are larger during wet years – 2020 was an extreme drought year and yet populations of BCM in the area were unusually large.

Regarding the importance of pollinators in the BCM lifecycle, the species is capable of setting seed without insect pollinators. In fact, because the sepals are partially fused by cottony hair that prevents the flowers from fully opening, it is thought that the plant is mostly self-pollinating (Hickman 1993). However, prolonged reproduction in this manner without the recombination facilitated by pollinators may threaten the genetic diversity of the BCM populations and their ability to tolerate stochastic disturbances. The exact pollinators of Butte County meadowfoam have not been identified, but other meadowfoam species are pollinated by native ground-nesting bees, honeybees, beetles, flies, true bugs, butterflies, and moths. Given this lack of knowledge about the pollinator species, the level of sensitivity of the species to pollinator reductions is uncertain. However, while it is true that habitat for pollinators will be removed through project, the planting palette used under the Specific Plan will emphasize use of native vegetation in landscape design and plantings of parks, streetscapes and common areas (Draft VESP, Action PROS-4.2). This, combined with the extensive grassland and oak woodland areas retained in preserves or permanent open space (approximately 2/3 would retain pervious surfaces) will ensure that habitat for a wide range of potential pollinator species remains relatively abundant within the project area. Nonetheless, text on page 4.3-50 of the Draft EIR has been added to supplement the analysis of impacts for BCM noting the potential for impacts to the species from reduction in pollinator species from site development. Please see Chapter 3, Changes to the Draft EIR for the revised language.

CDFW also expressed concerns that "the physical (i.e., 2018 Camp Fire) and climatic conditions within the project area have changed since the last botanical field survey was conducted." While the Camp Fire did burn through a portion of the project site including the area where BCM occurs on the property, BCM occurs in the

open grassland and it is evident by the burn scars on the trees surrounding the open grassland that the fire burning though this area was a lower intensity ground fire. Since BCM is endemic to the grasslands in northern California, there is no reason to believe that BCM is any different than most other California endemic plants in that they are sufficiently adapted to low intensity ground fires. There is also no evidence that the Camp Fire altered the hydrology of the area that supports BCM.

For all these reasons, new meadowfoam surveys are not necessary.

Comment Letter 1

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Plan Review Team Land Management PGEPlanReview@pge.com

November 1, 2021

Mike Sawley City of Chico PO Box 3420 Chico, CA 95927

Ref: Gas and Electric Transmission and Distribution

Dear Mike Sawley,

Thank you for submitting the Valley's Edge plans for our review. PG&E will review the submitted plans in relationship to any existing Gas and Electric facilities within the project area. If the proposed project is adjacent/or within PG&E owned property and/or easements, we will be working with you to ensure compatible uses and activities near our facilities.

Attached you will find information and requirements as it relates to Gas facilities (Attachment 1) and Electric facilities (Attachment 2). Please review these in detail, as it is critical to ensure your safety and to protect PG&E's facilities and its existing rights.

Below is additional information for your review:

- This plan review process does not replace the application process for PG&E gas or electric service your project may require. For these requests, please continue to work with PG&E Service Planning: <u>https://www.pge.com/en_US/business/services/buildingand-renovation/overview/overview.page</u>.
- If the project being submitted is part of a larger project, please include the entire scope of your project, and not just a portion of it. PG&E's facilities are to be incorporated within any CEQA document. PG&E needs to verify that the CEQA document will identify any required future PG&E services.
- An engineering deposit may be required to review plans for a project depending on the size, scope, and location of the project and as it relates to any rearrangement or new installation of PG&E facilities.

Any proposed uses within the PG&E fee strip and/or easement, may include a California Public Utility Commission (CPUC) Section 851 filing. This requires the CPUC to render approval for a conveyance of rights for specific uses on PG&E's fee strip or easement. PG&E will advise if the necessity to incorporate a CPUC Section 851 filing is required.

This letter does not constitute PG&E's consent to use any portion of its easement for any purpose not previously conveyed. PG&E will provide a project specific response as required.

Sincerely,

Plan Review Team Land Management

PG&E Gas and Electric Facilities



Attachment 1 – Gas Facilities

There could be gas transmission pipelines in this area which would be considered critical facilities for PG&E and a high priority subsurface installation under California law. Care must be taken to ensure safety and accessibility. So, please ensure that if PG&E approves work near gas transmission pipelines it is done in adherence with the below stipulations. Additionally, the following link provides additional information regarding legal requirements under California excavation laws: https://www.usanorth811.org/images/pdfs/CA-LAW-2018.pdf

1. Standby Inspection: A PG&E Gas Transmission Standby Inspector must be present during any demolition or construction activity that comes within 10 feet of the gas pipeline. This includes all grading, trenching, substructure depth verifications (potholes), asphalt or concrete demolition/removal, removal of trees, signs, light poles, etc. This inspection can be coordinated through the Underground Service Alert (USA) service at 811. A minimum notice of 48 hours is required. Ensure the USA markings and notifications are maintained throughout the duration of your work.

2. Access: At any time, PG&E may need to access, excavate, and perform work on the gas pipeline. Any construction equipment, materials, or spoils may need to be removed upon notice. Any temporary construction fencing installed within PG&E's easement would also need to be capable of being removed at any time upon notice. Any plans to cut temporary slopes exceeding a 1:4 grade within 10 feet of a gas transmission pipeline need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

3. Wheel Loads: To prevent damage to the buried gas pipeline, there are weight limits that must be enforced whenever any equipment gets within 10 feet of traversing the pipe.

Ensure a list of the axle weights of all equipment being used is available for PG&E's Standby Inspector. To confirm the depth of cover, the pipeline may need to be potholed by hand in a few areas.

Due to the complex variability of tracked equipment, vibratory compaction equipment, and cranes, PG&E must evaluate those items on a case-by-case basis prior to use over the gas pipeline (provide a list of any proposed equipment of this type noting model numbers and specific attachments).

No equipment may be set up over the gas pipeline while operating. Ensure crane outriggers are at least 10 feet from the centerline of the gas pipeline. Transport trucks must not be parked over the gas pipeline while being loaded or unloaded.

4. Grading: PG&E requires a minimum of 36 inches of cover over gas pipelines (or existing grade if less) and a maximum of 7 feet of cover at all locations. The graded surface cannot exceed a cross slope of 1:4.

5. Excavating: Any digging within 2 feet of a gas pipeline must be dug by hand. Note that while the minimum clearance is only 12 inches, any excavation work within 24 inches of the edge of a pipeline must be done with hand tools. So to avoid having to dig a trench entirely with hand tools, the edge of the trench must be over 24 inches away. (Doing the math for a 24 inch

PG&E Gas and Electric Facilities



wide trench being dug along a 36 inch pipeline, the centerline of the trench would need to be at least 54 inches [24/2 + 24 + 36/2 = 54] away, or be entirely dug by hand.)

Water jetting to assist vacuum excavating must be limited to 1000 psig and directed at a 40° angle to the pipe. All pile driving must be kept a minimum of 3 feet away.

Any plans to expose and support a PG&E gas transmission pipeline across an open excavation need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

6. Boring/Trenchless Installations: PG&E Pipeline Services must review and approve all plans to bore across or parallel to (within 10 feet) a gas transmission pipeline. There are stringent criteria to pothole the gas transmission facility at regular intervals for all parallel bore installations.

For bore paths that cross gas transmission pipelines perpendicularly, the pipeline must be potholed a minimum of 2 feet in the horizontal direction of the bore path and a minimum of 12 inches in the vertical direction from the bottom of the pipe with minimum clearances measured from the edge of the pipe in both directions. Standby personnel must watch the locator trace (and every ream pass) the path of the bore as it approaches the pipeline and visually monitor the pothole (with the exposed transmission pipe) as the bore traverses the pipeline to ensure adequate clearance with the pipeline. The pothole width must account for the inaccuracy of the locating equipment.

7. Substructures: All utility crossings of a gas pipeline should be made as close to perpendicular as feasible (90° +/- 15°). All utility lines crossing the gas pipeline must have a minimum of 12 inches of separation from the gas pipeline. Parallel utilities, pole bases, water line 'kicker blocks', storm drain inlets, water meters, valves, back pressure devices or other utility substructures are not allowed in the PG&E gas pipeline easement.

If previously retired PG&E facilities are in conflict with proposed substructures, PG&E must verify they are safe prior to removal. This includes verification testing of the contents of the facilities, as well as environmental testing of the coating and internal surfaces. Timelines for PG&E completion of this verification will vary depending on the type and location of facilities in conflict.

8. Structures: No structures are to be built within the PG&E gas pipeline easement. This includes buildings, retaining walls, fences, decks, patios, carports, septic tanks, storage sheds, tanks, loading ramps, or any structure that could limit PG&E's ability to access its facilities.

9. Fencing: Permanent fencing is not allowed within PG&E easements except for perpendicular crossings which must include a 16 foot wide gate for vehicular access. Gates will be secured with PG&E corporation locks.

10. Landscaping: Landscaping must be designed to allow PG&E to access the pipeline for maintenance and not interfere with pipeline coatings or other cathodic protection systems. No trees, shrubs, brush, vines, and other vegetation may be planted within the easement area. Only those plants, ground covers, grasses, flowers, and low-growing plants that grow unsupported to a maximum of four feet (4') in height at maturity may be planted within the easement area.

PG&E Gas and Electric Facilities



11. Cathodic Protection: PG&E pipelines are protected from corrosion with an "Impressed Current" cathodic protection system. Any proposed facilities, such as metal conduit, pipes, service lines, ground rods, anodes, wires, etc. that might affect the pipeline cathodic protection system must be reviewed and approved by PG&E Corrosion Engineering.

12. Pipeline Marker Signs: PG&E needs to maintain pipeline marker signs for gas transmission pipelines in order to ensure public awareness of the presence of the pipelines. With prior written approval from PG&E Pipeline Services, an existing PG&E pipeline marker sign that is in direct conflict with proposed developments may be temporarily relocated to accommodate construction work. The pipeline marker must be moved back once construction is complete.

13. PG&E is also the provider of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E's facilities must be reviewed and approved by PG&E to ensure that no impact occurs which may endanger the safe operation of its facilities.

PG&E Gas and Electric Facilities



Attachment 2 - Electric Facilities

It is PG&E's policy to permit certain uses on a case by case basis within its electric transmission fee strip(s) and/or easement(s) provided such uses and manner in which they are exercised, will not interfere with PG&E's rights or endanger its facilities. Some examples/restrictions are as follows:

1. Buildings and Other Structures: No buildings or other structures including the foot print and eave of any buildings, swimming pools, wells or similar structures will be permitted within fee strip(s) and/or easement(s) areas. PG&E's transmission easement shall be designated on subdivision/parcel maps as "RESTRICTED USE AREA – NO BUILDING."

2. Grading: Cuts, trenches or excavations may not be made within 25 feet of our towers. Developers must submit grading plans and site development plans (including geotechnical reports if applicable), signed and dated, for PG&E's review. PG&E engineers must review grade changes in the vicinity of our towers. No fills will be allowed which would impair ground-to-conductor clearances. Towers shall not be left on mounds without adequate road access to base of tower or structure.

3. Fences: Walls, fences, and other structures must be installed at locations that do not affect the safe operation of PG&'s facilities. Heavy equipment access to our facilities must be maintained at all times. Metal fences are to be grounded to PG&E specifications. No wall, fence or other like structure is to be installed within 10 feet of tower footings and unrestricted access must be maintained from a tower structure to the nearest street. Walls, fences and other structures proposed along or within the fee strip(s) and/or easement(s) will require PG&E review; submit plans to PG&E Centralized Review Team for review and comment.

4. Landscaping: Vegetation may be allowed; subject to review of plans. On overhead electric transmission fee strip(s) and/or easement(s), trees and shrubs are limited to those varieties that do not exceed 15 feet in height at maturity. PG&E must have access to its facilities at all times, including access by heavy equipment. No planting is to occur within the footprint of the tower legs. Greenbelts are encouraged.

5. Reservoirs, Sumps, Drainage Basins, and Ponds: Prohibited within PG&E's fee strip(s) and/or easement(s) for electric transmission lines.

6. Automobile Parking: Short term parking of movable passenger vehicles and light trucks (pickups, vans, etc.) is allowed. The lighting within these parking areas will need to be reviewed by PG&E; approval will be on a case by case basis. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications. Blocked-up vehicles are not allowed. Carports, canopies, or awnings are not allowed.

7. Storage of Flammable, Explosive or Corrosive Materials: There shall be no storage of fuel or combustibles and no fueling of vehicles within PG&E's easement. No trash bins or incinerators are allowed.

PG&E Gas and Electric Facilities



8. Streets and Roads: Access to facilities must be maintained at all times. Street lights may be allowed in the fee strip(s) and/or easement(s) but in all cases must be reviewed by PG&E for proper clearance. Roads and utilities should cross the transmission easement as nearly at right angles as possible. Road intersections will not be allowed within the transmission easement.

9. Pipelines: Pipelines may be allowed provided crossings are held to a minimum and to be as nearly perpendicular as possible. Pipelines within 25 feet of PG&E structures require review by PG&E. Sprinklers systems may be allowed; subject to review. Leach fields and septic tanks are not allowed. Construction plans must be submitted to PG&E for review and approval prior to the commencement of any construction.

10. Signs: Signs are not allowed except in rare cases subject to individual review by PG&E.

11. Recreation Areas: Playgrounds, parks, tennis courts, basketball courts, barbecue and light trucks (pickups, vans, etc.) may be allowed; subject to review of plans. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications.

12. Construction Activity: Since construction activity will take place near PG&E's overhead electric lines, please be advised it is the contractor's responsibility to be aware of, and observe the minimum clearances for both workers and equipment operating near high voltage electric lines set out in the High-Voltage Electrical Safety Orders of the California Division of Industrial Safety (<u>https://www.dir.ca.gov/Title8/sb5g2.html</u>), as well as any other safety regulations. Contractors shall comply with California Public Utilities Commission General Order 95 (<u>http://www.cuc.ca.gov/gos/GO95/go 95_startup page.html</u>) and all other safety rules. No construction may occur within 25 feet of PG&E's towers. All excavation activities may only commence after 811 protocols has been followed.

Contractor shall ensure the protection of PG&E's towers and poles from vehicular damage by (installing protective barriers) Plans for protection barriers must be approved by PG&E prior to construction.

13. PG&E is also the owner of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E's facilities must be reviewed and approved by PG&E to ensure that no impact occurs that may endanger the safe and reliable operation of its facilities.

PG&E Gas and Electric Facilities

4.1 Response to Agency Comments

Response to Letter 1

Pacific Gas and Electric Company (Plan Review Team, Land Management)

- **1-1** This comment is an introduction for comments that follow. The comment states that Pacific Gas and electric Company (PG&E) will review the submitted plans in relationship to any PG&E facilities and will work with the City to ensure compatible uses and activities near PG&E facilities. The comment cites PG&E information and requirements related to gas and electric facilities and requests the City's review of the comment letter attachments.
- **1-2** Future development would be required to coordinate with PG&E for the installation of electrical facilities. The comment is noted and will be forwarded to the decision makers for their consideration. The comment details the plan review process and states that the City will need to continue to work with PG&E Service Planning regarding the application process for PG&E gas or electric service.

The project applicant is committed to fulfilling the application process for electric services and will continue to coordinate with PG&E to ensure all requirements are met. The comment is noted and will be forwarded to the decision makers for their consideration.

1-3 The comment provides additional information regarding the application process for PG&E gas or electric service. The comment states that PG&E's facilities are to be incorporated within any CEQA document and PG&E needs to verify whether the CEQA document identifies future PG&E services.

Section 4.12, Public Utilities, of the Draft EIR states the project would require connections to PG&E electric services as well as updated infrastructure in compliance with requirements of the California Public Utilities Commission (CPUC). The City and the applicant will continue to coordinate with PG&E regarding future utility services. The comment does not address adequacy of the Draft EIR; therefore, no further response is required.

1-4 The comment states that an engineering deposit may be required to review plans for a project depending on its size, scope, location, and whether it relates to rearrangement or new installation of PG&E facilities.

The project applicant will continue to coordinate with PG&E on items related to the application process for electricity services and anticipates fulfilling all requirements, including any required deposits and/or fees. The comment does not address adequacy of the Draft EIR; therefore, no further response is required.

1-5 The comment states that any proposed uses within the PG&E easement may include a CPUC Section 851 filing. PG&E will advise whether the Section 851 filing will be required. The comment also states that the comment letter does not constitute PG&E's consent to use any portion of its easement for any purpose.

The comment is noted and will be forwarded to the decision makers for their consideration.

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Comment Letter 2



Jared Blumenfeld Secretary for Environmental Protection Department of Toxic Substances Control

Meredith Williams, Ph.D. Director 8800 Cal Center Drive Sacramento, California 95826-3200



Gavin Newsom Governor

November 16, 2021

Mr. Mike Sawley City of Chico Community Development Department Planning Division 411 Main Street, P.O. Box 3420 Chico, CA 95927 <u>Mike.Sawley@Chicoca.gov</u>

DRAFT ENVIRONMENTAL IMPACT REPORT FOR VALLEY'S EDGE SPECIFIC PLAN – DATED OCTOBER 2021 (STATE CLEARINGHOUSE NUMBER: 2019089041)

Dear Mr. Sawley:

The Department of Toxic Substances Control (DTSC) received a Draft Environmental Impact Report (EIR) for Valley's Edge Specific Plan (Project). The Lead Agency is receiving this notice from DTSC because the Project includes one or more of the following: groundbreaking activities, work in close proximity to a roadway, work in close proximity to mining or suspected mining or former mining activities, presence of site buildings that may require demolition or modifications, importation of backfill soil, and/or work on or in close proximity to an agricultural or former agricultural site.

DTSC recommends that the following issues be evaluated in the EIR Hazards and Hazardous Materials section:

- The EIR should acknowledge the potential for historic or future activities on or near the project site to result in the release of hazardous wastes/substances on the project site. In instances in which releases have occurred or may occur, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. The EIR should also identify the mechanism(s) to initiate any required investigation and/or remediation and the government agency who will be responsible for providing appropriate regulatory oversight.
- 2. Refiners in the United States started adding lead compounds to gasoline in the 1920s in order to boost octane levels and improve engine performance.

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Mr. Mike Sawley November 16, 2021 Page 2

	This practice did not officially end until 1992 when lead was banned as a fuel additive in California. Tailpipe emissions from automobiles using leaded gasoline contained lead and resulted in aerially deposited lead (ADL) being deposited in and along roadways throughout the state. ADL-contaminated soils still exist along roadsides and medians and can also be found underneath some existing road surfaces due to past construction activities. Due to the potential for ADL-contaminated soil DTSC, recommends collecting soil samples for lead analysis prior to performing any intrusive activities for the project described in the EIR.	2-3 Cont.
3.	If any sites within the project area or sites located within the vicinity of the project have been used or are suspected of having been used for mining activities, proper investigation for mine waste should be discussed in the EIR. DTSC recommends that any project sites with current and/or former mining operations onsite or in the project site area should be evaluated for mine waste according to DTSC's 1998 Abandoned Mine Land Mines Preliminary Assessment Handbook	2-4
4.	If buildings or other structures are to be demolished on any project sites included in the proposed project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted in accordance with DTSC's 2006 Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers.	2-5
5.	If any projects initiated as part of the proposed project require the importation of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination. DTSC recommends the imported materials be characterized according to <u>DTSC's 2001 Information</u> <u>Advisory Clean Imported Fill Material</u> .	2-6
6.	If any sites included as part of the proposed project have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the EIR. DTSC recommends the current and former agricultural lands be evaluated in accordance with DTSC's 2008 <u>Interim Guidance for Sampling Agricultural Properties (Third Revision)</u> .	2-7

Mr. Mike Sawley November 16, 2021 Page 3

DTSC appreciates the opportunity to comment on the EIR. Should you need any assistance with an environmental investigation, please visit DTSC's <u>Site Mitigation &</u> <u>Restoration Program</u> page to apply for lead agency oversight. Additional information regarding voluntary agreements with DTSC can be found at <u>DTSC's Brownfield website</u>.

If you have any questions, please contact me at (916) 255-3710 or via email at <u>Gavin.McCreary@dtsc.ca.gov</u>.

Sincerely,

Jamin Malanny

Gavin McCreary Project Manager Site Evaluation and Remediation Unit Site Mitigation and Restoration Program Department of Toxic Substances Control

cc: (via email)

Governor's Office of Planning and Research State Clearinghouse <u>State.Clearinghouse@opr.ca.gov</u>

Mr. Dave Kereazis Office of Planning & Environmental Analysis Department of Toxic Substances Control Dave.Kereazis@dtsc.ca.gov 2-8

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Response to Letter 2

California Department of Toxic Substances Control (Gavin McCreary, Project Manager, Site Evaluation and Remediation Unit)

- **2-1** This comment is an introduction to comments that follow. The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.
- **2-2** The comment states that the Draft EIR should acknowledge the potential for historic or future activities to result in the release of hazardous materials on or near the project site, conduct further studies where needed, and identify mechanisms to investigate and/or remediate hazardous materials release.

The potential adverse effects on the environment due to exposure to or release of hazards or hazardous materials that could result from implementation of the project are discussed in Section 4.8, Hazards and Hazardous Materials of the Draft EIR. A summary of the existing (historic) conditions on the project site are discussed on pages 4.8-3 and 4.8-4 of the Draft EIR. The Phase 1 Environmental Site Assessment prepared for the project (Draft EIR, Appendix G) did not identify any evidence of hazardous waste generation or storage, petroleum hydrocarbon products, chemical usage, stained soils, on the project site or on adjacent properties with the exception for asbestos-containing materials and lead-based paint to be present in the remaining buildings within the former ranch (see Appendix G). Because no recognized environmental conditions (RECs) identified as the presence (or likely presence) of hazardous substances or petroleum products under conditions that indicate an existing or past release, or material threat of a release into structures or into the ground, groundwater, or surface water were identified a Phase II Environmental Site Assessment was not required (Draft EIR p. 4.8-3).

The analysis of potential impacts associated with the use, transport, storage and handling of hazardous materials is included under Impact 4.8-1 starting on page 4.8-13. During construction and operation of the project all hazardous substances, such as gasoline, diesel fuel, lubricating oil, grease, and solvents used during construction would be used, stored and transported in compliance with all applicable federal, state, and local laws and regulations. During project operation, common household hazardous wastes used by residents, such as paints, cleansers, pesticides, and fertilizers would be stored, used and transported in compliance with the label instructions provided. In determining the level of significance, the analysis assumes that the proposed project would comply with all applicable state and local ordinances and regulations and impacts were determined to be less than significant. Mitigation measure HAZ-1 is required to address the potential for any asbestos or lead based paint to be present in the former ranch buildings and includes specific actions, precautions, and abatement measures in the event any asbestos or lead-based paint is encountered.

2-3 The comment raises a concern regarding aerially deposited lead (ADL) in soils adjacent to roadways and recommends soil sampling be conducted for lead prior to construction activities.

The California Department of Transportation or Caltrans currently has an agreement with DTSC regarding management of impacted soils for roadway projects that may contain lead. In areas where road construction will occur, Caltrans has found levels of lead within 30 feet of the edge of

the pavement (DTSC 2016). The project site is undeveloped and located at the edge of the City limits in the unincorporated County. As shown on Figure 2-2 in Chapter 2, Project Description (Draft EIR p. 2-5) the eastern and western portions of the project site are adjacent to undeveloped land and a bike path. A small portion of the northern boundary of the site is adjacent to E. 20th Street, a local neighborhood road that was developed in the early 2000's when the residential neighborhood was constructed. Because this roadway was constructed after 1992 the potential for any ADL in the soils is very low. A small portion of Skyway is adjacent to the southern boundary of the site along with a segment of Honey Run Road. As shown on Figure 2-3 on page 2-11, development in the southern portion of the site is limited to open space with only a small area designated for residential uses that is set back over 100+ feet from Skyway or Honey Run Road due to the underlying topography. Due to the distance from the roadways the potential to encounter any soils contaminated with lead is highly unlikely. The portion of the project site adjacent to Skyway is small and, as shown on the figure, proposed for commercial uses. Because tentative maps and site plans are not available it is not known if development would occur within 30 feet of Skyway. To ensure the potential for ADL is addressed mitigation measure HAZ-1 on page 4.8-15 of the Draft EIR is revised to require a soil survey be completed prior to development of the commercial uses along Skyway. The revisions are provided in Chapter 3, Changes to the Draft EIR.

2-4 The comment states that if any sites within the project area or vicinity have been used for mining activities, proper investigation for mine waste should be discussed in the EIR. The comment also cites the DTSC 1998 Abandoned Mine Land Mines Preliminary Assessment Handbook.

As described in the Notice of Preparation (NOP) for the project released on August 14, 2019 (Draft EIR, Appendix A), and Chapter 1, Introduction and Scope of the Draft EIR, there are two designated mineral resource zones within Butte County. The Green Rock Quarries Oroville Plant No.1, located about 7 miles north of the City of Oroville, has been classified as MRZ-2a for railroad ballast for part of the property, and either MRZ-2b or MRZ-1 for railroad ballast for the remainder. The Power House Aggregate project site, located about 7 miles southwest of the City of Oroville, has been classified as MRZ-2 for construction aggregate. There are no active mines or known mineral resource zones occurring within the City of Chico city limits or within the plan area according to California Department of Conservation (DOC) resource maps (DOC 2022). Therefore, no sites within the project area or sites located within the vicinity of the project have been used or are suspected of having been used for mining activities, and further investigation is not required.

2-5 The comment states that if buildings or other structures are to be demolished, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. The comment also states that removal, demolition, and disposal of any of these chemicals should be conducted in compliance with California environmental regulations and policies.

As discussed in Section 4.8, Hazards and Hazardous Materials, the proposed project would involve the construction of new buildings, and demolition of the existing barns associated with the former ranch. The Phase I Environmental Site Assessment conducted to support the hazardous materials discussion of the EIR evaluated the buildings proposed for demolition for the presence of harmful materials. As described under Impact 4.8-1 on page 4.8-14 of the Draft EIR, the Phase I Environmental Site Assessment did not note any evidence of petroleum hydrocarbon products, chemical usage, stained

soils, volatile organic compounds, naturally occurring asbestos, radon gas, or other hazardous wastes or materials. The Phase I Environmental Site Assessment did indicate the potential for asbestoscontaining materials and lead-based paint to be present in the remaining buildings within the former ranch. The Draft EIR discloses that removal of these structures could potentially cause a release of these materials to the environment and identified a potentially significant impact because the buildings slated for demolition have not been surveyed for the presence of asbestos-containing material (ACM) or lead paint.

All potentially hazardous substances would be handled in accordance with federal, state, and local regulations, including those from the Cal/OSHA and the EPA. As discussed in the Regulatory Setting of Section 4.8, Hazards and Hazardous Materials, the EPA and Cal/OSHA include regulations and requirements for the demolition of buildings with ACMs, which includes using construction workers trained in the removal of ACMs. Further, mitigation measure HAZ-1 requires a hazardous material building survey prior to removal to determine whether ACMs and lead-based paints are present within the former ranch buildings. If found, all of the aforementioned actions and precautions would be followed during construction and demolition. Therefore, mitigation measure HAZ-1 ensures that in the event any ACMs or lead-based paints are present, abatement procedures would be included to ensure the impact is reduced to a less-than-significant level. The Draft EIR therefore provides an adequate discussion of the potential presence of lead-based paints or products, ACMs, and other hazardous materials.

2-6 The comment states that if any projects initiated as part of the proposed project require the importation of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination, consistent with DTSC's Information Advisory Clean Imported Fill Material Fact Sheet.

A site-specific Geotechnical Report was prepared for the project (Draft EIR, Appendix E). Future development would be required to comply with all federal, state and local requirements that pertain to both construction and operational activities. Section 16.28.030 of the Chico Municipal Code states that an application for a grading permit requires submittal of a soils and/or geotechnical report if required by the building official. Any recommendations included in geotechnical or soils reports, if applicable, shall be a part of the grading plan submittal (Draft EIR p.4.6-15). The California Building Code requires a preliminary soils report be prepared for all subdivisions creating five or more parcels. It is anticipated as developers submit tentative maps to the City a site-specific Geotechnical Report or soils report, at a minimum, would be prepared and compliance with the requirements set forth in the report, including testing soils to be imported to ensure no contaminated soils would be used would be required by the City.

2-7 The comment states that if any sites included as part of the project have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the EIR. The comment also cites the DTSC 2008 Interim Guidance for Sampling Agricultural Properties (Third Revision).

As discussed in the NOP released for the project on August 14, 2019 (Draft EIR, Appendix A), the VESP planning area is not located in or near an area that supports or historically supported crop production or weed abatement activities. The project site is designated as grazing land by the DOC Farmland Mapping and Monitoring Program (FMMP), which indicates that the site contains land

on which the existing vegetation is suited to the grazing of livestock, and does not support crop cultivation (DOC 2018). Due to the underlying soils the project site has never been used for crop production nor has there been any weed abatement pesticides applied to the site. Further, the potential adverse effects on the environment due to exposure to or release of hazardous materials, including pesticides, that could result from implementation of the project are discussed in Section 4.8, Hazards and Hazardous Materials. Therefore, the Draft EIR provides an adequate discussion of potential impacts related to pesticide use and further investigation regarding previous on-site activities or the presence of organochlorinated pesticides is not warranted.

2-8 This comment concludes the preceding comments and provides additional DTSC information and resources.

The comment does not address the accuracy or adequacy of the Draft EIR; therefore, no further response is required.

Comment Letter 3

3-1

3-2



Department of Development Services

T: 530.552.3700

F: 530.538.7785

7 County Center Drive

Oroville, California 95965

Paula M. Daneluk, AICP, Director Curtis Johnson, Assistant Director

buttecounty.net/dds

December 8, 2021

Mike Sawley, AICP Principal Planner 411 Main Street, 2nd Floor Chico, CA 95927

Re: Butte County Planning Division Comments on the Valley's Edge Draft EIR.

Dear Mike Sawley,

The Butte County Doe Mill / Honey Run Specific Plan will determine the mix of uses that will occur in a 1,444-acre area located east of Chico. The Specific Plan will allow mixed residential development and some commercial uses. (Butte County General Plan 4-(33-34)). Upon review of the Draft Environmental Impact Report for the Valley's Edge Specific Plan, which is similar in scope to the Butte County Doe Mill / Honey Run Specific Plan, Butte County Planning has the following comment:

Per Division 7 of the Butte County Zoning Ordinance, we recommend the 300' agricultural buffer be enforced along the north eastern section approximately 1,800 feet in length adjacent to parcel APN: 018-390-008 from project parcel APN: 018-390-007. We note that per page 3-2 and Figure 2-3 of the DEIR the 300' agricultural buffer is in effect for the eastern boundary, and meets the requirement. The Agricultural Buffer is intended to protect agricultural lands from the negative impacts of residential development and activities. The 300-foot buffer is placed upon the developed parcel, and restricts residential development. Other uses that do not involve the construction of residences are permitted within the buffer area.

If you have any questions about this comment please contact me at 530.552.3685 or tweems@buttecounty.net.

Sincerely,

Tristan Weems, AICP Associate Planner

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Response to Letter 3

Butte County Department of Development Services (Tristan Weems, AICP, Associate Planner)

- **3-1** The comment provides an introduction to the comment below addressing agricultural buffers. The comment is noted and will be forwarded to the decision makers for their consideration.
- **3-2** The comment cites the Butte County zoning ordinance regarding agricultural buffers and recommends a 300-foot agricultural buffer be provided along the northeastern portion of the project site to protect agricultural activities in the County from nuisance concerns from future residents.

The County's Zoning Ordinance requires that a 300-foot setback be provided from any property line that abuts Agriculture zones (Division 7, Agricultural Buffers, Butte County 2018). As shown on Figure 2-3 in Chapter 2, Project Description, in the Draft EIR the proposed project includes a 150-foot setback along the northern boundary adjacent to unincorporated areas of Stilson Canyon and a 300-foot setback along the eastern boundary. However, if the project is approved and is annexed into the City it would be subject to the City's requirements and the County's ordinance would not apply. The City's Agricultural Preservation Standards (Chico Municipal Code Chapter 19.64) supports and encourages agricultural activities in the vicinity of the City and requires a disclosure be provided to property owners within 1,000 feet of land used or zoned for agricultural uses. The code also requires a 100-foot buffer between commercial crop production within the City's Sphere of Influence Boundary and any habitable structure. In addition, the City's 2030 General Plan Policy LU-2.6 (Agricultural Buffers) requires buffering for new urban uses along the City's Sphere of Influence adjacent to commercial crop production. Since the VESP's land use plan includes setbacks would meet applicable City agricultural setbacks, no changes to the Draft EIR are necessary.

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Comment Letter 4



BUTTE LOCAL AGENCY FORMATION COMMISSION

1453 Downer Street, Suite C
Oroville, California 95965-4950 (530)538-7784
Fax (530)538-2847
www.buttelafco.org

December 8, 2021

Mike Sawley, Principal Planner Planning Services Department City of Chico PO Box 3420 Chico, CA 95927

RE: Review of the Valley's Edge Specific Plan Draft EIR

Dear Mr. Sawley:

The Butte Local Agency Formation Commission (LAFCo) appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) prepared for the Valley's Edge Specific Plan project, which would require annexation to the City of Chico, under the authority of the Butte LAFCo.

General Comments

As LAFCo has not yet received an annexation application for the project, our comments at this time are not to be considered as a measure of completeness for the anticipated annexation application. The following comments are provided in order to allow the City of Chico the opportunity to address LAFCo concerns related to the project description, environmental review and issues related to impacts to other agencies should this be necessary to effectively process the annexation request. At such time an annexation application is formally submitted, LAFCo will review all materials and make a completeness determination, which may require the submittal of additional information in order to effectively evaluate the proposed annexation.

Government Code Section 56668 lists the fourteen factors that LAFCo's must consider in the review of a proposal. These factors are:

- a) Population and population density; land area and land use; per capita assessed valuation; topography, natural boundaries, and drainage basins; proximity to other populated areas; the likelihood of significant growth in the area, and in adjacent incorporated and unincorporated areas, during the next 10 years.
- b) Need for organized community services; the present cost and adequacy of governmental services and controls in the area; probable future needs for those services and controls; probable effect of the proposed incorporation, formation, annexation, or exclusion and of Steve Peterson March 20, 2007 Page 2 of 5

- c) Alternative courses of action on the cost and adequacy of services and controls in the area and adjacent areas. "Services," as used in this subdivision, refers to governmental services whether or not the services are services, which would be provided by local agencies subject to this division, and includes the public facilities necessary to provide those services.
- d) The effect of the proposed action and of alternative actions, on adjacent areas, on mutual social and economic interests, and on the local governmental structure of the county.
- e) The conformity of both the proposal and its anticipated effects with both the adopted commission policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities set forth in Section 56377.
- f) The effect of the proposal on maintaining the physical and economic integrity of agricultural lands, as defined by Section 56016.
- g) The definiteness and certainty of the boundaries of the territory, the nonconformance of proposed boundaries with lines of assessment or ownership, the creation of islands or corridors of unincorporated territory, and other similar matters affecting the proposed boundaries.
- h) Consistency with city or county general and specific plans.
- i) The sphere of influence of any local agency, which may be applicable to the proposal being reviewed.
- j) The comments of any affected local agency or other public agency.
- k) The ability of the newly formed or receiving entity to provide the services, which are the subject of the application to the area, including the sufficiency of revenues for those services following the proposed boundary change.
- Timely availability of water supplies adequate for projected needs as specified in Section 5352.5.
- m) The extent to which the proposal will affect a city or cities and the county in achieving their respective fair shares of the regional housing needs as determined by the appropriate council of governments consistent with Article 10.6 (commencing with Section 65580) of Chapter 3 of Division 1 of Title 7.
- n) Any information or comments from the landowner or owners.
- o) Any information relating to existing land use designations.

LAFCo staff encourages the City to review the above factors and ensure that the Specific Plan is consistent with and addresses these factors in the DEIR.

Please accept the following specific comments regarding the DEIR:

Agricultural Issues

The proposal would result in the conversion of land identified as Agriculture by the Butte County General Plan. Pursuant to Butte LAFCO Policy 2.13.1, LAFCO will apply a heightened level of review when considering proposals for changes of organization or reorganization that are likely to result in the conversion of prime agricultural/open space land use (as defined in Government Code Section 56560) to other uses. Only if the Commission finds that the proposal will lead to planned, orderly, and efficient development, will the Commission approve such a conversion. For purposes of this

4-2

4-1 Cont. standard, a proposal leads to planned, orderly, and efficient development only if all of the following criteria are met:

- The land subject to the change of organization or reorganization is contiguous to either lands developed with an urban use or lands within the sphere and designated for urban development;
- The proposed development of the subject lands is consistent with the Sphere of Influence Plan, including the Municipal Service Review of the affected agency or agencies and the land subject to the change of organization is within the current 10-year Sphere of Influence boundary;
- The land subject to the change of organization is likely to be developed within five years. In the case of very large developments, annexation should be phased wherever feasible. If the Commission finds phasing infeasible for specific reasons, it may approve annexation if all or a substantial portion of the subject land is likely to develop within a reasonable period of time;
- Insufficient vacant non-prime or open space land exists within the existing agency boundaries or applicable 10-year Sphere of Influence that is planned and developable for the same general type of use; and,
- The proposal will have no significant adverse effect on the physical and economic integrity of other agricultural/open space lands.

Further, pursuant to LAFCo policy 2.13.4, in making the determination whether conversion will adversely impact adjoining prime agricultural or open space lands, LAFCO will consider the following factors:

- The agricultural/open space significance of the subject and adjacent areas relative to other agricultural/open space lands in the region;
- The use of the subject and the adjacent areas;
- Whether public facilities related to the proposal would be sized or situated so as to facilitate the conversion of adjacent or nearby agricultural/open space land, or will be extended through or adjacent to any other agricultural/open space lands which lie between the project site and existing facilities;
- Whether natural or man-made barriers serve to buffer adjacent or nearby agricultural/open space land from the effects of the proposed development; and,
- Applicable provisions of the County's General Plan Agricultural Element, Open Space and Land Use Elements, applicable growth-management policies, or other statutory provisions designed to protect agriculture or open space. (Refer to www.buttecounty.net/dds/planning,htm to locate Butte County's General Plan.)

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The Draft EIR does not address the topic of agriculture as "impacts in these areas would be less than significant or no impacts would occur". While LAFCo staff agrees the proposed project would not impact or convert Prime Agricultural Land, no determination is made that the project area does/does not qualify as Open Space Land as defined in Government Code Section 56560. Further discussion of this topic is needed to ensure that the project meets all LAFCo policies.

Sincerely,

Shannon Costa

Shannon Costa Local Government Planning Analyst Butte LAFCo

Response to Letter 4

Butte County Local Agency Formation Commission (Shannon Costa, Local Government Planning Analyst)

4-1 The comment provides an overview of the LAFCo requirements for annexation and notes Butte County LAFCo has not yet received an application for annexation of the project site into the City of Chico.

The comment is noted and will be forwarded to the decision makers for their consideration.

4-2 The comment provides background on how LAFCo reviews conversion of land designated for Agriculture and the specific LAFCo criteria to ensure the planned, orderly and efficient development of the site.

The comment lists LAFCo criteria required to be met to approve an annexation. Most of the factors are not CEQA related but with respect to the environmental issues that are mentioned (e.g., land use, public facilities, and growth) please see Draft EIR Chapter 3, Land Use and Planning and Sections 4.11, Public Services and Recreation and 4.12, Public Utilities and Chapter 5, CEQA Considerations for an analysis of growth inducing impacts. As explained in the Notice of Preparation (Draft EIR, Appendix A), the proposed project would not impact any protected agricultural resources; therefore, the Draft EIR does not include any additional analysis of agricultural resources. Also see Response to Comment 4-3.

4-3 The comment asserts that the Draft EIR does not address the conversion of agriculture and notes no determination has been made that the project site does not qualify as Open Space, as defined in Government Code Section 65560.

As described in the Notice of Preparation (Draft EIR, Appendix A), land within the boundaries of the plan area is designated grazing land by the California Department of Conservation Farmland Mapping and Monitoring Program. The plan area is not located in or near an area that supports crop production and would not convert any Prime Farmland, Farmland of Statewide Importance, or Unique Farmland to developed uses and would not encroach on any other protected resource lands such as those under Williamson Act contracts. Therefore, impacts were determined to be less than significant, and an analysis of agricultural resources was not further evaluated in the Draft EIR.

The Draft EIR addresses requirements for annexation in Chapter 3, Land Use and Planning. LAFCo's regulatory requirements are provided in detail starting on page 3-5. The land use consistency evaluation reviews the proposed project for consistency with applicable Butte County LAFCO policies. Physical environmental impacts resulting from development of the project site are discussed in the applicable technical sections in Chapter 4 of this Draft EIR. An analysis of LAFCo's policies is included in Table 3-1 starting on page 3-24. The analysis concludes the project meets LAFCo's policies for annexation.

Government Code Section 65560 addresses open space lands and defines open space as any parcel or area of land or water that is devoted to an open-space use designated on a local, regional, or state open-space plan as open space for the preservation of natural resources; for the managed

production of resources, including, but not limited to, forest lands, rangeland, agricultural lands; outdoor recreation; public health and safety; military installations; or for the protection of places, features, and objects. The project site is identified in both the Butte County and the City of Chico General Plans as an area designated to accommodate residential and commercial growth. It is not designated open space for the preservation of natural resources, production of resources, or for outdoor recreation. Thus, the project does not meet the definition of open space set forth in Government Code Section 65560. An evaluation of compliance with all LAFCo requirements will be required as part of the annexation application process where a determination will be made regarding whether the site will be annexed into the City.

Comment Letter 5

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STEPHEN ERTLE

629 Entler Avenue, Suite 15 Chico, CA 95928 (530) 332-9400 (530) 332-9417 Fax



December 9, 2021

City of Chico Community Development Department Attn: Mike Sawley, Principal Planner P.O. Box 3420 Chico, CA 95927

RE: Draft Environmental Impact Report - Valley's Edge Specific Plan

Dear Mr. Sawley,

The Butte County Air Quality Management District (District) appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Valley's Edge Specific Plan (VESP). Based on the information reviewed, the District has the following comments:

- Pages 4.2-8, 4.2-9, 4.2-29 (clarification): Butte County was designated attainment for the 24-hr PM2.5 national ambient air quality standard by US EPA effective August 10, 2018.
- 2. Page 4.2-16 (*clarification*): US EPA officially determined that the Chico / Butte County nonattainment area had attained the 24-hour PM2.5 NAAQS on September 10, 2013. US EPA approved the Chico / Butte County redesignation request and maintenance plan on July 11, 2018, effective August 10, 2018. The first sentence in that bulleted item is correct.
- 3. Page 4.2-21 (typo): Action C-1.5 is listed twice on this page.
- 4. Page 4.2-32: The District concurs that impacts from construction-related criteria emissions are expected to be less than significant based on the information provided.
- Page 4.2-38: The District concurs that impacts from construction-related toxic air contaminant (TAC) emissions are expected to be less than significant with the implementation of Mitigation Measures AQ-6 and AQ-7.
- Pages 4.2-34, 4.2-41: The District concurs that operational-related emissions and the project's cumulative impact are expected to be less than significant with the implementation of Mitigation Measures AQ-2, AQ-3, AQ-4, and AQ-5. The District can participate as needed with an off-site mitigation program.
- 7. Page 4.2-35: The District recommends that on-site measures that reduce ROG, NOx, and PM₁₀ emissions be prioritized over off-site mitigation measures where feasible. Actions from the VESP resulting in emission reductions of ROG, NOx, and PM₁₀ that are currently not quantified in the DEIR (such as electric vehicle infrastructure) should be quantified as best as possible prior to participation in an off-site mitigation program.

If you have any questions, please contact me at 530-332-9400 x108.

Sincerely Jason Mandly

Senior Air Quality Planner

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Response to Letter 5

Butte County Air Quality Management District (Jason Mandly, Senior Air Quality Planner)

5-1 The commenter notes an update to the attainment status in Butte County, shown on Table 4.2-1 in the Draft EIR needs to be corrected.

The text in Table 4.2-1 on page 4.2-8 of the Draft EIR has been revised along with text updates where this information is mentioned in other areas of the analysis. The revisions are shown in Chapter 3, Changes to the Draft EIR.

5-2 The commenter notes the US EPA officially determined that the Chico/Butte County nonattainment area had attained the 24-hour PM_{2.5} NAAQS on September 20, 2013. The US EPA approved the Chico/Butte County redesignation request and maintenance on July 11, 2018, effective August 10, 2018.

The Draft EIR text on page 4.2-9 has been revised to reflect the most recent Chico/Butte County attainment status and is provided in Chapter 3, Changes to the Draft EIR.

5-3 The commenter notes a typographical error on page 4.2-21 of the Draft EIR, Action C-1.5 is listed twice.

Revisions were made to page 4.2-21 of Section 4.2, Air Quality, of the Draft EIR, in which the duplicate Action C-1.5 was removed. Please see Chapter 3, Changes to the Draft EIR for this correction.

5-4 The commenter concurs that the construction emissions presented on page 4.2-32 of the Draft EIR would be less than significant.

The comment is noted.

5-5 The commenter concurs that the conclusions identified on page 4.2-38 of the Draft EIR regarding construction-related toxic air containment emissions are expected to be less than significant with implementation of mitigation measures AQ-6 and AQ-7.

The comment is noted.

5-6 The commenter concurs that the operational conclusions identified on pages 4.2-34 and 4.2-41 of the Draft EIR are expected to be less than significant with implementation of mitigation measures AQ-2, AQ-3, AQ-4, and AQ-5. The commenter also notes that the District can participate, as needed, with an off-site mitigation program (required by mitigation measure AQ-4).

The comment is noted.

5-7 The comment recommends that on-site measures that reduce ROG, NO_x, and PM₁₀ emissions be prioritized over off-site mitigation measures where feasible, and that actions from the VESP resulting in emission reductions of ROG, NO_x, and PM₁₀ be quantified as best as possible prior to participation in an off-site mitigation program.

As discussed in Section 4.2, Air Quality in the Draft EIR, the VESP includes many goals, policies, and actions related to improving air quality, in addition to Title 24 building code requirements that address air quality. VESP Actions C-1.5, C-1.7, and C-1.8 would promote alternative methods such as walking and biking and requires that the project develop electric vehicle (EV) infrastructure (Draft EIR p. 4.2-33), all of which would reduce criteria air pollutant emissions associated with gasoline-fueled transportation sources. The project is encouraging the use of neighborhood electric vehicles or NEVs by providing Class II on-street routes that are designed to accommodate both NEV and bicycles to connect the residential areas to the village core. However, because the extent to which residents, employees, and visitors would use these alternative methods is unknown, the associated reductions cannot be specifically quantified. Furthermore, buildings constructed under the VESP would comply with the Butte County Air Quality Management District Rules 230 (Architectural Coatings) and 231 (Cutback and Emulsified Asphalt) in order to limit the generation of volatile organic compounds (VOC) emissions. Therefore, reductions associated with operational-related emissions pertaining to compliance with the VESP goals, policies, and actions cannot be quantified and no changes to the Draft EIR are required.

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Comment Letter 6

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State of California - Natural Resources Agency DEPARTMENT OF FISH AND WILDLIFE North Central Region 1701 Nimbus Road, Suite A Rancho Cordova, CA 95670-4599 916-358-2900 www.wildlife.ca.gov EDMUND G. BROWN JR., Governor CHARLTON H. BONHAM, Director



December 15, 2021

City of Chico Community Development Department Mike Sawley, Principal Planner 411 Main Street, P.O. Box 3420 Chico, California 95927 mike.sawley@chicoca.gov

RE: VALLEY'S EDGE SPECIFIC PLAN (PROJECT)(VESP) DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) SCH#2019089041

Dear Mr. Sawley:

The California Department of Fish and Wildlife (CDFW) received and reviewed the DEIR from the City of Chico (City) pursuant the California Environmental Quality Act (CEQA) statute and guidelines¹.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish, wildlife, native plants, and their habitat. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may need to exercise its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802.). Similarly, for purposes of CEQA, CDFW provides, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed

Conserving California's Wildlife Since 1870

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

The approximately 1,448-acre Project site is located in unincorporated Butte County within the City's Sphere of Influence, at the transition of the valley floor and lower foothill region. The proposed Project includes a mixed-use community with a range of housing types, commercial uses, parks, trails and recreation and open space areas. The residential component would consist of approximately 1,392 multi-generational or family housing residential units and 1,385 age-restricted (55+) residential units. The commercial portion includes approximately 56 acres designated for a mix of professional and medical offices, neighborhood retail shops and services, multi-family apartments, day care, and hospitality uses. Approximately 672 acres would be designated as parks, trails, open space and preservation, including a large regional park, a community park, neighborhood parks, mini parks and tot lots, and an active adult park.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and, where appropriate, mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

Cumulative Impacts

Section 4.3-5 of the DEIR discusses the Project's cumulative effects to natural resources including special-status plant and animal species; however, the DEIR only focuses on Project impacts in relation to the unadopted Butte Regional Conservation Program (BRCP). The DEIR argues that the Project would not exceed any of the applicable maximum allowable removal thresholds established by the BRCP, and therefore, cumulative impacts to biological resources would be less than significant. The BRCP is not final or adopted and thus it should not be used in the cumulative analysis for this Project. The DEIR should include a complete cumulative impact analysis that does not rely on the BRCP.

Cumulatively, the Oak Valley Phase 1, Meriam Park, Belvedere Heights Phase 2, and Stonegate residential developments and the Canyon View High School site have already had a significant impact on local biological resources. If approved, the proposed





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Project will bring the total of permanently impacted habitats to nearly 1,000 acres of grassland habitat and several acres of sensitive aquatic habitat including vernal complexes, drainages, and seasonal wetlands. As addressed in this comment letter, many of Mitigation Measures BIO-1 through BIO-10 are unenforceable, based on outdated information, and/or fail to explain how the measures as implemented will be effective in reducing the impacts. For these reasons the implementation of Mitigation Measures BIO-10 are insufficient to reduce the Project's cumulative impact to a less-than-significant level. The Project's contribution to cumulative impacts to biological resources as proposed will be cumulatively considerable resulting in a potentially significant cumulative impact. CDFW recommends that the Project alternatives are modified to ensure they avoid, minimize, or mitigate these cumulative impacts to natural resources described in Section 4.3-5 of the DEIR.

Deferred Mitigation

CEQA Guidelines §15126.4 (a)(1)(B) states that formulation of mitigation measures should not be deferred until some future time. The DEIR lists a number of mitigation measures for biological resources that rely on future approvals or agreements as a means to bring identified significant environmental effects to below a level of significance. Because there is no guarantee that these approvals or cooperation with all of the involved entities will ultimately occur, the mitigation measures are unenforceable and may not reduce the impacts to biological resources to a less-than-significant level. Mitigation measures should establish performance standards to evaluate the success of the proposed mitigation, provide a range of options to achieve the performance standards, and must commit the lead agency to successful completion of the mitigation. Mitigation measures should also describe when the mitigation measure will be implemented and explain why the measures are feasible. Therefore, CDFW recommends that the DEIR include measures that are enforceable and do not defer the details of the mitigation to the future. The DEIR defers mitigation for impacts to aquatic features, Butte County meadowfoam (Limnanthes floccosa ssp. californica) (BCM), and the removal of mature trees (addressed below). The DEIR should give an accurate and detailed explanation of proposed avoidance measures and compensatory mitigation to offset permanent impacts to these resources.

Impacts to Hydrologic Features and Associated Habitats

The DEIR should identify all perennial, intermittent, and ephemeral rivers, streams, and lakes within the Project footprint and any habitats supported by these features such as wetlands and riparian habitats that are subject to section 1600 et seq. of the Fish and Game Code. The DEIR should identify any potential impacts to fish and wildlife resources dependent on those hydrologic features; and estimate the footprint area that will be temporarily and/or permanently impacted by the proposed Project by hydrologic feature and habitat type. The maps in the DEIR do not clearly show the impact to these habitats which makes it difficult to know what will be impacted and what regulatory permits may be required. CDFW recommends updating the maps to provide this clarity.



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Notification to CDFW may be required, pursuant to Fish and Game Code, section 1602 if the Project proposes to: divert, obstruct, or change the natural flow or the bed, channel or bank of any river, stream, or lake; use material from a streambed; or result in the disposal or deposition of debris, waste, or other material where it may pass into any river, stream, or lake. The construction of recreational trails in riparian areas may also be an activity subject to Fish and Game Code, section 1602. In these cases, the DEIR should propose mitigation measures to avoid, minimize, and mitigate impacts to fish and wildlife resources.

Please note that CDFW definition of wetlands as well as extent of the areas regulated under Fish and Game Code, section 1602 differs from other aquatic resource regulatory agencies.

Butte County Meadowfoam

Butte County Meadowfoam is endemic to Butte County and is restricted to a narrow 25mile strip along the eastern flank of the Sacramento Valley from central Butte County to the northern portion of the City. BCM populations and its habitat have been substantially reduced in number and fragmented by development.

In 2009 a genetic study of BCM throughout its range (Sloop, 2009) identified that the isolated, unconnected occurrences of BCM surrounding the City of Chico are genetically unique from occurrences north of and south of the City highlighting the importance of preserving the viability of smaller BCM populations.

The DEIR's proposed BCM mitigation measures are inadequate to reduce Project impacts to less-than-significant levels for the following reasons: a) assessment of Project impacts on BCM is based on survey results that are outdated and performed during periods of historic drought; and b) BIO-1 does not set specific performance criteria to ensure that the measure, as implemented, will be effective.

a) Protocol-level BCM Surveys

BCM is an annual species which occurs in habitat subject to annual fluctuations such as drought; therefore, BCM may not be evident and identifiable every year. Both the physical (i.e. 2018 Camp Fire) and climatic conditions within the Project area have changed since the last botanical field survey was conducted in 2017. Botanical surveys that are older than two years and performed in conditions that do not maximize detection may overlook the presence or actual density of BCM on the Project site. CDFW recommends additional protocol level botanical surveys be conducted at the appropriate time of year with proper weather conditions and the results be incorporated into the DEIR for review and comment. Both current and past survey results should be used to provide an accurate assessment of the BCM populations that may be impacted. (CEQA Guidelines, § 15126.4, subd. (a)(1)(B).) If after updating the surveys, it is determined that the project may have the potential to result in "take", as defined in the

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Fish and Game Code, section 86, of a State-listed species, the DEIR should disclose that an Incidental Take Permit (ITP) (Fish & G. Code, § 2081) should be obtained from CDFW prior to starting construction activities. The DEIR should include all avoidance and minimization measures that will be employed to reduce impacts to a less than significant level. If take of listed species is expected to occur even with the implementation of these measures, an ITP will include additional minimization and mitigation to fully mitigate the impacts to State-listed species (Cal. Code Regs., tit. 14, § 783.2, subd.(a)(8)).

b) BCM Habitat Mitigation and Monitoring Plan

BIO-1 calls for the establishment of on-site preserves and requires the developer to prepare a Habitat Mitigation and Monitoring Plan, record easements, and complete other requirements, as necessary, to establish the two Butte County Meadowfoam preserves and the other preserve on the VESP project site in compliance with all applicable state and federal resource agency permits. The preserves shall be separated from any development by a minimum of 250 feet unless site-specific hydrological analysis accepted by the U.S. Fish and Wildlife Service demonstrates that a reduced separation would still prevent direct or indirect effects to Butte County meadowfoam within the preserve. No development shall be approved by the City within 500 feet of the avoidance area until the preserves are established.

Throughout the DEIR the "on-site preserves" for BCM are referred to inconsistently as either "Primary Open Space/P-OS" or "preserves." The DEIR does not clearly define the locations of the on-site preserves graphically. The "preserve" limits and designations in Figure 4.3-4 of the DEIR conflict with those shown in Figure 2.5. In addition, the "preserves" shown on Figure 4.3-4 do not appear to extend 250 feet from all BCM occurrences as described in the DEIR. Without a static legal description and an accurate visual representation of the "preserves" it is impossible to determine whether their establishment is sufficient to avoid impacts to BCM populations.

Further, the DEIR provides no scientific evidence or assessment of whether such a small preserve is sufficient to successfully avoid all potential long-term impacts to BCM to a less-than-significant level within the project area. Construction of low-density residential development will abut the "on-site preserves" with no assessment provided of potential adverse impacts from project-related construction, maintenance, and fuel modification activities. Adverse impacts that could occur include but are not limited to edge effects such as a permanent change in year-round hydrology, exposure to herbicides, and introduction of invasive ant species onto the habitats occupied by these plants, which could interfere with pollination and dispersal. Without science-based evidence that a preserve of this size is sufficient to prevent long-term impacts and potential extirpation of BCM, impacts from adjacent development will continue to be significant. In addition to this, the small size of the preserves may make adaptative management difficult and could result in the extirpation of BCM at this location. CDFW

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recommends that additional biological studies including appropriate hydraulic studies are prepared to establish the minimum BCM preserve size.

The DEIR defers formulation of certain components of BIO-1 without setting specific performance criteria to ensure that these measures, as implemented, will be effective. For instance, BIO-1 mandates the "VESP Habitat Mitigation and Monitoring Plan shall include at a minimum: management techniques to be used on the preserves; monitoring methods and frequencies to detect changes in Butte County Meadowfoam and allow for adaptive management; and a funding strategy to ensure that prescribed monitoring and management would be implemented in perpetuity to ensure efficacy of the preserves." Yet the DEIR does not specify performance standards for evaluating the efficacy of the Habitat Mitigation and Monitoring Plan. Additionally, BIO-1 does not provide for any feasible alternatives should the long-term, irreversible impacts from the project result in impacts to BCM. Given the high variability of BCM populations, CDFW recommends annual BCM surveys are part of the long-term management plan to establish the long-term viability of the population and that the DEIR includes measures that will be implemented if BCM population declines are detected within the preserves.

Rare Plants

a) Protocol-level Rare Plant Surveys

The DEIR does not explain why it was infeasible for the project proponent to perform protocol-level rare plant surveys within the last two years so an accurate assessment of project impacts can be conducted (CEQA Guidelines, § 15126.4, subd. (a)(1)(B)). Both the physical (i.e. 2018 Camp Fire) and climatic conditions within the Project area have changed since the last botanical field survey was conducted in 2017. Botanical surveys that are older than two years and performed in conditions that do not maximize detection may overlook the presence or actual density of rare plants on the Project site. CDFW recommends additional protocol-level rare plant surveys be conducted at the appropriate time of year with proper weather conditions, and the results incorporated into the DEIR for review and comment. Protocol-level surveys shall be conducted in compliance with CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (2021)*.

b) Shield-bracted Monkeyflower and Bidwell's Knotweed

Populations of shield-bracted monkeyflower (*Erythranthe glaucescens*) and Bidwell's knotweed (*Polygonum bidwelliae*) occur on the site (DEIR - Attachment C). Given the specialized habitats and limited range and distribution of these species they should be considered species of regional and local significance (§ 21155. 1, subd. (a)(2)(c)(iii)). CDFW recommends the avoidance and minimization measures provided for these species in the 2018 Biological Resource Assessment be incorporated into the DEIR to reduce project impacts to shield-bracted monkeyflower and Bidwell's knotweed.

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Western Spadefoot

The DEIR does not explain why the project proponent has not performed focused surveys for spadefoot toads (*Spea hammondii*). CDFW recommends focused multi-year surveys for spadefoot toads be conducted at the appropriate time of year with proper weather conditions. Survey methods and results should be incorporated into the DEIR for review and comment.

The DEIR states, "habitat for western spadefoot is limited to the northwestern portion of the project site where there are deeper soils and aquatic habitat." However, burrow depths can be quite shallow ranging from approximately 1/3 inch to 7 inches (Baumberger et. al 2019); therefore, suitable upland habitat for western spadefoot may be found throughout the site, not just in the northwestern portion. Western spadefoot are primarily terrestrial and have been recorded occupying upland habitat as far as 859 feet from the nearest aquatic breeding pool (Baumberger et. al 2019). To reduce impacts to western spadefoot, preserved habitat in the northwestern portion of the site should expand a minimum of 859 feet from all aquatic features. Preserved habitat should be placed in a conservation easement and fenced to prevent public access. In addition, potential long-term edge effects on preserved habitat including but not limited to altered hydrology, exposure to pesticides, and light pollution should be assessed and included in the DEIR for public review and comment.

Ringtail

CDFW recommends avoidance and minimization measures are implemented to mitigate potential impacts to ringtail (*Bassariscus astutus*) to less-than-significant. The DEIR states that only the riparian habitat within the Project site provides habitat for ringtail. The DEIR goes on to state, "the likelihood of denning is reduced because the project site does not have extensive riparian habitat (less than 1% of project site) and lacks permanent, year-round water."

Research shows that contrary to the popular conception that ringtails require open, permanent water for survival, studies have found many ringtail home ranges had no water source within them, and no ringtail were observed in the vicinity of water (Harrison 2012). Ringtails can be found in habitats lacking drinking water and are capable of producing urine concentrations among the highest known with the Procyonidae family which allows for water economy comparable to that of the desert kit fox (*Vulpes macrotis*) (Chevalier 2005). Ringtail are known to occupy oak woodland habitat with relatively large home ranges (Harrison 2012). Based on ringtails' ability to occupy a variety of habitats regardless of the presence of permanent water, all 487 acres of blue oak foothill pine habitat and removal of an estimated 200 acres of oak woodland proposed by the Project may have a significant impact on any ringtails occupying the site. In addition, the impacts from the construction of trails throughout riparian and blue oak foothill pine habitat and light pollution from project development may be significant

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impacts to resident ringtail and should be assessed and included in the DEIR for review and comment.

CDFW recommends a thorough and accurate assessment of direct project related impacts on ringtail and its habitat be included in the DEIR prior to Project approval. To minimize long-term impacts to ringtail and their habitats, CDFW recommends the 487 acres of blue oak foothill pine habitat and 13 acres of valley foothill riparian be avoided as much as possible. These avoided habitats should be placed in a conservation easement and fenced to prevent public access. In addition, avoidance and minimization measures to reduce the effect of light pollution on these avoided habitats should be included in the DEIR. Please note that ringtails are fully protected species and CDFW cannot authorize take to this species.

Nesting Bird Surveys.

The nesting bird season is generally defined as February 1 through August 31; however, earlier nesting may occur based on several factors including species, altitude, and weather. Fish and Game Code section 3503 protects the nests and eggs of all birds, not just migratory birds and birds of prey, regardless of the time of year. To minimize the chances of missing nests, pre-construction surveys for nesting birds may need to be performed outside of the general nesting bird season.

In addition, CDFW recommends BIO-2(b) be revised to read as follows: "If any active nests are observed during surveys, a qualified biologist shall establish a suitable avoidance buffer from the active nest. The buffer distance *shall be a minimum of 250 feet for passerines and 500 feet for raptors. Buffer distances may be increased or reduced* based on factors such as the species of bird, topographic features, intensity and extent of the disturbance, timing relative to the nesting cycle, and anticipated ground disturbance schedule *as determined by the qualified biologist.* Limits of construction to avoid active nests shall be established in the field with flagging, fencing, or other appropriate barriers and shall be maintained until the chicks have fledged, are foraging independently, and are no longer dependent on the nest, as determined by the qualified biologist. *The qualified biologist shall regularly monitor the nest and shall have stop work authority if construction activities are having an adverse impact on the nest.* CDFW shall be consulted if active nests are observed during the pre-construction survey."

Bird Enhancement and Mortality Reduction Strategies in Project Design and Implementation.

Proposed development will ultimately border existing open space areas and drainages onsite. These open space areas provide suitable habitat for nesting birds. Placement of buildings adjacent to suitable nesting bird habitat may adversely affect bird populations by introducing sources of common bird mortalities such as reflective windows that birds may collide with. Given declines in segments of the overall bird population and

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ecological benefits of healthy bird activity, CDFW recommends consideration of bird enhancement and mortality reduction strategies in project design and implementation. Incorporation of these strategies can reduce anthropogenic effects on birds and promote sustainable development in California.

Collisions with clear and reflective sheet glass and plastic is also a leading cause in human-related bird mortalities. Many types of windows, sheet glass, and clear plastics are invisible to birds resulting in casualties or injuries from head trauma after an unexpected collision. Birds may collide with windows as little as one meter away in an attempt to reach habitat seen through, or reflected in, clear and tinted panes (Klem 2014), so even taking small measures to increase visibility of windows to birds can make a substantial difference in minimizing long-term impacts of urban development near natural environments.

Incorporation of bird and wildlife strategies not only promotes environmental stewardship but also facilitates compliance with State and federal protections aimed at preserving bird populations. CDFW recommends that the City includes in the DEIR bird and wildlife friendly strategies for all windows within the project:

 Install screens, window patterns, or new types of glass such as acid-etched, fritted, frosted, ultraviolet patterned, or channel. Additional information can be found at <u>https://www.fws.gov/birds/bird-enthusiasts/threats-tobirds/collisions/buildings-and-glass.php.</u>

Mitigation to Minimize Artificial Lighting Impacts

Artificial light is another outcome of development. Roads and buildings typically include exterior night lighting and therefore have potential to introduce or increase light pollution to adjacent fish and wildlife habitat. The adverse ecological effects of artificial night lighting on terrestrial, aquatic, and marine resources such as fish, birds, mammals, and plants are well documented (Johnson and Klemens 2005; Rich and Longcore 2006). Some of these effects include altered migration patterns and reproductive and development rates, changes in foraging behavior and predator-prey interactions, altered natural community assemblages, and phototaxis (attraction and movement towards light). Light pollution disrupts the ability of night-foraging birds (CDFW 2007).

Illumination of riparian corridors by night lighting has the potential to adversely affect birds. Physiological, developmental, and behavioral effects of light intensity, wavelength, and photoperiod on bird species are well documented. In the wild, urban lighting is associated with early daily initiation of avian song activity (Bergen and Abs 1997). Avian species are known to place their nests significantly farther from motorway lights than from unlighted controls (de Molenar et al, 2000). Placement of nests away from lighted areas implies that artificial light renders part of the home range less suitable for nesting. If potential nest sites are limited within the bird's home range, reduction in available sites associated with artificial night lighting may cause the bird to use a suboptimal nest

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site that is more vulnerable to predation, cowbird parasitism, or extremes of weather. Artificial lighting generally threatens wildlife by disrupting biological rhythms and otherwise interfering with the behavior of nocturnal animals (contributions from Artificial Night Lighting Conference, 2002). Nocturnal and migrating birds, migrating bats, insects, fish, and amphibians are particularly affected by artificial night lighting (Evans Ogden 1996 and citations therein). Billions of moths and other insects are killed from lights each year. Nocturnal birds use the stars and moon for navigation during migrations. When these birds fly through a brightly lit area, they can become disoriented, which can lead to injury and/or death. In addition, artificial lighting can affect aquatic invertebrates that are prey for other animals. Other references that may provide useful insight into the analysis of indirect impacts include Longcore and Rich (2001) and the National Cooperative Highway Research Program (2002).

As described in the DEIR, it would be difficult, if not impossible, to orient the lights in a manner that obstructs all light from reaching wildlife and their habitats onsite. The glow cast from headlights and streetlights would spill into sensitive habitats. In an area that now experiences minimal urban lighting (sky glow) and almost no direct lighting, this would likely constitute a significant biological impact. CDFW recommends the DEIR include minimum setbacks between artificial lights and adjacent woodland and riparian habitats to reduce this potentially significant impact.

Oak Woodland

The proposed oak woodland impacts listed in the DEIR contradict the acreages of habitat provided in the 2018 Biological Resource Assessment (BRA) (DEIR-Attachment C). Section 4.3-2 of the DEIR states. Please clarify this discrepancy, the DEIR should accurately present and analyze impacts to all habitats present onsite.

Per the DEIR, the Project will convert an estimated 200 acres of blue oak foothill pine woodland to development while preserving 80% of the existing oak canopy onsite; however, based on the information provided in the 2018 BRA, the project site only contains 485.7 acres of blue oak foothill pine habitat. Therefore, the Project is proposing to permanently convert approximately 40% of the existing blue oak foothill pine habitat to development.

The Oak Woodland section on page 29 of the 2018 BRA states, "An oak canopy evaluation was conducted within the BSA by Gallaway Enterprises in 2017. This oak canopy evaluation involved the GIS mapping of the oak canopy within the BSA and the use of survey plots to ground truth and collect data to estimate the number of trees within the oak canopy mapped. The resulting acres of oak canopy mapped was a total of 239 acres with the average of 23 trees per an acre of canopy. The DEIR does not provide a figure showing where the 239 acres of oak woodland is located. Without knowing the location of this oak woodland, direct and indirect project impacts on the woodland cannot be analyzed. CDFW recommends a map of the 239 acres of oak woodland be included in the DEIR.

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The VESP concludes that Project developer(s) shall appropriately mitigate for trees removed and/or damaged by the Project in accordance with the VESP Oak Woodland Mitigation and Monitoring Program (OWMMP) (such as planting onsite, off site, or paving an in-lieu fee). Mitigation ratios provided in the OWMMP vary from 1:1 to 9:1 with differing years of monitoring required. The 9.1 ratio would require planting 9 acorns for each tree removed. These mitigation ratios are inadequate for the replacement of mature native oak trees. The OWMMP goes on to state, "Replacement trees shall be of similar species, unless otherwise approved by the Director or their designee, and shall be placed in areas dedicated for tree plantings such as open space corridors, gateway areas, center medians, parks, and recreational areas." Planting trees of a different species in center medians, parks, and recreational areas is inadequate mitigation for the replacement of native oak trees and woodlands. Oak trees are characterized by large, spreading canopies that provide shade and perching, nesting, and foraging habitat for a wide variety of wildlife. Planting the trees in medians, park and recreational areas does not provide the same habitat values as the oak woodland impacts caused by the Project and is not adequate mitigation to offset Project impacts.

Oak trees typically have a very slow growth rate. The mitigation ratios proposed by the DEIR, would not adequately replace the habitat value that would be lost as a result of the removal of these types of trees. There would be a temporal loss of this habitat, due to the fact that replacement oak trees would not attain comparable size and structure until many decades or more. CDFW recommends the DEIR provide analysis showing that BIO-9 would be likely to succeed in recreating or restoring the oak woodland lost to project development. In addition, the DEIR should include specifics of where the mitigation trees will be planted, establish success criteria for mitigation plantings. CDFW recommends these oak mitigation areas be permanently protected via a conservation easement to ensure the perpetual existence of oak woodland and riparian corridors within the Project site.

The OWMMP also defers formulation of the in-lieu fee program as an alternative to onsite tree replacement. An in-lieu fee to mitigate impacts to oak woodland within the City does not exist. The OWMMP provides no explanation as to whether the in-lieu fee payment will be used to mitigate impacts to oak woodland. The OWMMP does not specify the fees to be paid or the number of trees to be planted offsite, nor does it identify whether any other sites might be available to the City for the planting of new oak trees. The DEIR also does not contain any analysis of the feasibility of an offsite tree replacement program. Similarly, the Regeneration Banking option provided in the OWMMP offers no information as to where oak trees will be planted. CDFW recommends the DEIR provides additional details needed to implement the Regeneration Banking as an oak woodland mitigation option.

CDFW is concerned that the OWMMP appears to exempt tree mitigation for trees removed as part of wildfire risks (section E.2(1) of OWMMP) and those in open space areas (section E.2(4) of OWMMP). The DEIR does not include information on how many

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trees these exemptions may apply to, and therefore an accurate assessment of the significance of these exemptions on existing oak woodland cannot be performed. CDFW recommends that all trees impacted by the project are mitigated.

Additionally, throughout the OWMMP the Community Development Director or their designee is granted the authority to deem trees exempt from the OWMMP (section E.2 (1, 4) of OWMMP), waive and adjust mitigation requirements for trees removed (section E.6 (4) of OWMMP), and determine species of replacement trees (section E.6 (5) of OWMMP). CDFW recommends the OWMMP be redrafted to remove all exemptions and authorities granted the Community Development Director to ensure trees removed are mitigated.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special- status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be submitted online or mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

Pursuant to Public Resources Code §21092 and §21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the proposed project. Written notifications shall be directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670 or emailed to R2CEQA@wildlife.ca.gov.

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Due to information in the public record, previous biological surveys conducted for the Project site, and the sensitivity of the biological resources present within the direct Project footprint, CDFW concludes that the Project as proposed will result in a significant impact to the environment. CDFW respectfully recommends the comments included in this letter be addressed. CDFW requests to be consulted when the City addresses these comments to ensure that the project will adequately mitigate the potential impacts to special-status species present within the Project area.

CDFW appreciates the opportunity to provide comments on the Project and we hope you will contact us to discuss our concerns, comments, and recommendations in greater detail. If you have any questions, please contact Melissa Murphy, Senior Environmental Scientist (Specialist), at melissa.murphy@wildlife.ca.gov.

Sincerely,

Kevin Thomas Regional Manager

ec: Michelle Havens, michelle_havens@fws.gov U.S. Fish and Wildlife Service

> Kelley Barker, Kelley.barker@wildlife.ca.gov Juan Lopez Torres, Juan.Torres@wildlife.ca.gov Melissa Murphy, <u>melissa.murphy@wildlife.ca.gov</u> CEQA Comment Letters *California Department of Fish and Wildlife*

State Clearinghouse

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Response to Letter 6

California Department of Fish and Wildlife (Kevin Thomas, Regional Manager)

6-1 The comment provides introductory text to the comments below and notes CDFW's appreciation of the opportunity to provide comments and recommendations.

The comment is noted.

6-2 The comment provides introductory text noting CDFW's role as a trustee agency under CEQA, and potentially as a regulatory authority for discretionary approvals.

The comment is noted.

6-3 The comment questions the Draft EIR's evaluation of cumulative impacts in the context of the Butte Regional Conservation Program (BRCP) allowable removal thresholds, based on the fact that the BRCP has not yet been adopted.

The City is aware of the BRCP status but opted to include the BRCP thresholds because they are a product of a detailed regional planning and analysis effort that carefully considered cumulative effects to biological resources. This existing analysis represents several years of effort by local, state and federal experts and represents a valid threshold for evaluation of cumulative effects to biological resources.

6-4 The comment notes that several projects in the vicinity of the proposed project have resulted in permanent impacts to grassland habitat and other natural resources. The comment further suggests that mitigation measures BIO-1 through BIO-10 are not sufficient to mitigate project contributions to cumulative impacts to a less-than-significant level, and that project alternatives should be modified to reduce cumulative impacts.

The comment does not provide details on asserted deficiencies in the mitigation measures or specific suggestions for alternatives, which are provided in subsequent comments. Please see Chapter 3, Changes to the Draft EIR for updates to the biological resource mitigation measures. Please also see Responses to Comments 6-5, 6-19, 6-25 and Master Response 2 related to comments on the adequacy of proposed mitigation measures, and Responses to Comments 9-83 and 9-86 related to project alternatives.

6-5 The comment asserts that some mitigation measures presented in the Draft EIR, specifically for aquatic features, Butte County meadowfoam (BCM), and removal of trees, constitute deferral of mitigation under CEQA Guidelines §15126.4 (a)(1)(B). CDFW asserts these are deferred because they rely on future approvals or agreements to bring identified significant environmental effects below a level of significance.

Please refer to Master Response 2 regarding BCM and adequacy of identified mitigation, as well as revisions to mitigation measure BIO-1 in Chapter 3, Changes to the Draft EIR, which provide more specificity for BCM mitigation. Avoidance and minimization of impacts related to tree removal are specified in the Oak Woodland Mitigation and Management Plan (OWMMP). Refer to Response to Comment 6-25 regarding mitigation measure BIO-9 and the role of the OWMMP.

6-6 The comment requests that the Draft EIR provide additional detail on aquatic features within the project footprint, including changes to mapping to specifically identify perennial, intermittent and ephemeral rivers, streams and lakes, and quantification of project impact footprints on each type of aquatic resource.

The description of and mapping of aquatic resources in the Draft EIR is based on the Aquatic Resources Delineation (Draft EIR, Appendix C) prepared for the project which was reviewed and verified by the Army Corps of Engineers. That delineation did not distinguish between perennial, intermittent or ephemeral streams; however, the Biological Resources Assessment describes them as "several ephemeral and 2 intermittent drainages". The habitat value of these two types of drainages is essentially the same, so the distinctions were not relevant when evaluating potential impacts to plants, wildlife, or fish. When preparing the Draft EIR, the conceptual land use plan for the project was compared against the verified delineation and impacts to wetlands and waters were estimated. In general, and as noted on page 4.3-61 of the Draft EIR, the proposed VESP land use plan appears to avoid impacts to most wetlands and drainages on the site with the exception of road crossings, 0.11 acre of Very Low Density Residential, and 1.25 acres of other development. However, given the conceptual nature of the VESP, impacts were assumed to be significant and must be mitigated through detailed project-level permitting included in mitigation measure BIO-10. That measure requires future project developers to create, preserve, or restore jurisdictional waters of the U.S. and state consistent with applicable no-net-loss policies. Required avoidance and mitigation acreages would be determined based on detailed project-level plans through consultation with Army Corps of Engineers, Regional Water Quality Control Board, and CDFW, as required.

6-7 The comment describes the statutory authority of CDFW under Section 1602 of the Fish and Game Code and how that authority differs from those of other aquatic resource regulatory agencies. The comment also notes that construction of recreational trails in riparian areas may be an activity subject to Section 1602. Finally, the comment requests that that Draft EIR propose measures to avoid, minimize and mitigate impacts to fish and wildlife resources.

The Draft EIR states on page 4.3-30 that "Valley oak riparian woodland associated with the two intermittent drainages on site is protected under Section 1602 of California Fish and Game Code. Any impacts to this community to accommodate stream crossings would potentially require authorization from CDFW in the form of a lake or streambed alteration agreement." The Draft EIR also notes on page 4.3-36 that "The project site supports 11.183 acres of channels protected under Fish and Game Code Section 1600. If proposed project implementation would impact any of these channels, the provisions of Fish and Game Code Section 1602 would apply to the proposed project." The Draft EIR includes mitigation to protect Sensitive Natural Communities (mitigation measure BIO-8) and mitigate impacts to aquatic resources (mitigation measure BIO-10) that are regulated by CDFW. These measures would avoid or substantially reduce impacts to fish and wildlife habitat provided by the riparian areas on the project site to a less-than-significant level.

6-8 The comment provides a brief overview of BCM and where it is present in the Sacramento Valley and suggests the Draft EIRs BCM mitigation measures are inadequate based on assertions of outdated surveys and lack of specific performance criteria to ensure the measure will be effective.

Please see Master Response 2 that addresses the concerns raised regarding BCM.

6-9 The comment further elaborates on the rational why additional protocol level botanical surveys be conducted and if there is any potential to result in 'take' an Incidental Take Permit would be required by CDFW.

Please see Master Response 2 which addresses the request for additional BCM surveys.

6-10 The comment is addressing proposed BCM preserves and the adequacy of mitigation measure BIO-1.

Please see Master Response 2 which addresses these concerns.

6-11 The comment goes into further specificity regarding the size of the proposed BCM preserves and expresses a concern regarding proximity of proposed development and recommends additional biological and hydraulic studies be prepared to determine the minimum preserve size.

Please see Master Response 2 which addresses these concerns.

6-12 The comment is addressing mitigation measure BIO-1 and recommends annual BCM surveys be included in the mitigation measure to determine the long-term viability of the preserves.

Please see Master Response 2 and revisions to mitigation measure BIO-1 on page 4.3-54 of the Draft EIR provided in Chapter 3, Changes to the Draft EIR.

6-13 The comment notes that rare plant surveys referenced in the Draft EIR are more than two years old and requests that new surveys be conducted, in compliance with CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (2021). The comment also suggests that climatic and physical conditions of the site have changed since the most recent botanical survey in 2017.

Please see Master Response 2.

6-14 The comment requests that the Draft EIR include mitigation for potential impacts to shield-bracted monkeyflower and Bidwell's knotweed.

These species are CNPS Rank 4 species, which do not meet the Draft EIR's definition of specialstatus plant species (Draft EIR p. 4.3-17). CNPS Rank 3 species are considered "plants about which more information is needed" and Rank 4 species are "plants of limited distribution" but are not considered rare, threatened or endangered in California. As stated on page 4.3-38 of the Draft EIR, "Based on the results of prior rare plant surveys of the project site, as well as a review of relevant literature, Butte County meadowfoam is the only plant present on the project site that is protected under the California Native Plant Protection Act." However, adverse effects to these and other potentially occurring CNPS List 3 or 4 species would be reduced and offset through designation, management, and monitoring of on-site preserves and designation of open space areas within the project site, including management of invasive species that can out-compete native species. Additional protective measures specific to these two species have been added to mitigation measure BIO-1 as requested. See Chapter 3, Changes to the Draft EIR for the revised language. 6-15 The comment questions why focused multi-year surveys were not conducted for western spadefoot toad.

A significant portion of the potentially suitable western spadefoot habitat would be preserved as part of the avoided vernal pool area in the northwest corner of the project site. Due to the extended timeline and large scope of the project, multi-year protocol-level surveys are unlikely to provide meaningful additional information as the presence of this species is already assumed. The explanation for not conducting surveys prior to EIR preparation is stated on page 4.3-50 in the Draft EIR: "this species is nocturnal, cryptic, and unlikely to be detected during general biological surveys." Please also see Response to Comment 6-16 detailing that western spadefoot are unlikely to occur outside the preserved area on the project site.

6-16 The comment states that suitable upland habitat for western spadefoot toad is located throughout the project site, and that an 859-foot development buffer should be established surrounding all aquatic features to protect western spadefoot toad.

Please see Response to Comment 6-15. Regarding the study cited in the comment (Baumberger et al. 2019), that reference documents a very limited study with a low sample size in a coastal environment. The findings of that study are not necessarily applicable to the habitat present on the project site, where topsoil more remote from the aquatic resources is generally very thin and soil layers below are clayey, which would prevent digging by spadefoot toad. As noted in Baumberger et al., spadefoots strongly select against burrowing in soils with higher clay content – preferring instead friable soils with high sand/loam content. Therefore, because suitable soil for western spadefoot is limited to the northwestern portion of the project site, its habitat is unlikely to exist throughout the project site. While there is no regulatory requirement to provide a buffer distance from aquatic habitat for western spadefoot, the vernal pool preserve established to protect BCM populations and associated upland areas would also function to preserve a substantial portion of potential upland habitat for western spadefoot.

6-17 The comment recommends that the EIR provide additional avoidance and minimization measures for impacts to ringtail. The comment provides literature references that suggest ringtail habitat is not limited to areas with permanent water sources and can occupy oak woodland and blue-oak foothill pine habitats, which are more abundant on site. The comment also requests that the EIR analyze effects of trail construction and light pollution from site development on ringtail that may occupy these habitats after development.

The Draft EIR does not state that ringtail could not occur within the project site; in fact, the Draft EIR states that ringtail has a moderate potential to occur and notes the occurrence nearby at the Butte Creek Ecological Preserve (Draft EIR p. 4.3-28). Although ringtail can occupy habitat without permanent water sources, it remains correct to state, as the Draft EIR does on page 4.3-28, that the likelihood of denning is reduced by the lack of extensive riparian cover or permanent water, plus the expansive open areas with minimal cover. The species profile compiled by CDFW for the California Wildlife Habitat Relationship System states that the species is "usually not found more than 1 km (0.6 km) from permanent water". As the Draft EIR states, the riparian habitat of most value to the ringtail would be preserved within an approximately 370-acre regional park (Draft EIR p. 4.3-52, the Regional Park is now 420 acres, see Chapter 3, Changes to the Draft EIR). Although this designation would allow some recreational activities on designated trails, the nocturnal habits of the ringtail would prevent direct conflicts with trail users. However, please note that the impact

conclusion for ringtail has been changed to Less than Significant instead of No Impact. Please see revisions to the impact analysis for ringtail in Chapter 3, Changes to the Draft EIR.

Regarding effects of lighting on the regional park area and riparian habitat, the VESP includes action LU-4.4, which requires the project to "Minimize light pollution by eliminating streetlights where not necessary for public and personal safety, and by employing dark sky best practices and fixtures such as maximum hardscape lighting of approximately .030 W/ft² (except for high security areas)". Dark sky guidelines are also included in Appendix A to the VESP, which states in Section A.3.3 Subsection b "All exterior lighting shall be low intensity and directed downward, below the horizon plane of the fixture, to prevent objectionable brightness or light trespass onto adjacent properties". Implementation of the required lighting standards is consistent with the Butte Regional Conservation Plan (BRCP) avoidance mitigation measure (AMM) 7 which provides direction to use low-glare lighting adjacent to habitat areas. The VESP lighting policies and design guidelines would avoid and/or minimize effects to potential ringtail habitat within riparian areas of the project site (Draft EIR p. 4.3-43).

6-18 The comment requests additional analysis of project-related impacts on ringtail and potential ringtail habitat be provided in the EIR, and that the blue oak foothill pine and valley foothill riparian potential habitat be avoided as much as possible during development. The comment suggests that those habitat areas be put in a conservation easement and fenced to prevent public access. Finally, the comment requests avoidance and minimization measures to minimize light pollution on any avoided habitat areas.

Please see Response to Comment 6-17.

6-19 The comment suggests several adjustments to Draft EIR mitigation measure BIO-2(b) to provide more specific requirements for pre-construction nesting bird surveys.

These revisions have been incorporated into mitigation measure BIO-2(b) on page 4.3-54 of the Draft EIR and are provided in Chapter 3, Changes to the Draft EIR.

- 6-20 The comment requests that the project consider bird enhancement and mortality reduction strategies in project design and implementation. Please refer to revisions to mitigation measure BIO-2 that incorporate those measure to reduce effects to nesting birds, and indirectly to other birds.
- **6-21** The comment continues from 6-20 and suggests that the Draft EIR incorporate requirements for window designs that minimize risks for bird and wildlife collisions such as using screens, window patterns, or new types of acid-etched, fritted, frosted, ultraviolet patterned, or channel.

These suggestions are acknowledged, however, the generalized impact of bird collisions with future windows within the project is not sufficiently linked to a potentially significant environmental impact that would justify adding mitigation to the EIR. There will likely be some future instances of reflective windows on future residences facing open space areas that contain trees which support nesting birds. According to the study referenced in the comment, the most likely avian species to collide with windows are those that are most locally abundant, and windows that pose the most hazard are larger, reflective, and positioned to reflect outside vegetation. Therefore, such future

bird collisions within the project would likely occur among the 38 bird species observed during biological field surveys (e.g., scrub jay, lesser gold finch, common yellowthroat, etc.), or the subset of those common species that remain following development of nearby residences. Since none of those bird species are deemed sensitive using the applicable EIR criteria, there is not sufficient justification to consider future bird collisions with buildings within the project a significant impact. The City will, however, encourage the applicant to include information to homebuilders and future homebuyers to alert them of this concern and to encourage optimal land stewardship by using window treatments that minimize bird collisions, especially on larger window panes that face open space areas.

6-22 The comment summarizes literature regarding indirect effects of lighting on adjacent habitat areas and wildlife and suggests the Draft EIR include minimum setbacks between artificial lighting and adjacent woodland and riparian areas to reduce the effects.

As noted in the Draft EIR (Draft EIR p. 4.3-64), the VESP includes an Action under Goal LU-4 (Minimize Visual Impacts) to "Minimize light pollution by eliminating streetlights where not necessary for public and personal safety, and by employing dark sky best practices and fixtures such as maximum hardscape lighting of approximately .030 W/ft² (except for high security areas)." Design Guidelines for the VESP also include dark sky compliant exterior lighting standards as described in VESP Appendix A, Section A.3.2. These design measures are expected to minimize light spillover into preserved habitat and reduce impacts to less than significant.

6-23 This comment summarizes statements that are detailed in subsequent comments (see comments 6-23 and 6-24), involving perceived discrepancies between "oak woodland impacts" described in the Draft EIR and the acreages of habitat provided in the Biological Resource Assessment (BRA) in Appendix C of the Draft EIR. The comment states that the Draft EIR should accurately present and analyze impacts to all habitats present on the project site.

The Biological Resources section of the Draft EIR relies on the BRA for the relative amounts of mapped habitat on site, and the information is consistent in both documents. Table 4.3-2 and Figure 4.3-1 on pages 4.3-4 and 4.3-5 of the Draft EIR list the following vegetation communities and landcover types: annual grassland (938.694 acres), blue oak foothill pine woodland (485.819 acres), valley foothill riparian woodland (12.949 acres), riverine (11.266 acres) and barren (2.512 acres). Figure 5 of the BRA lists the following habitat types: annual grassland (939.8 acres), blue oak foothill pine (485.7 acres), valley foothill riparian (13 acres), and riverine (11.2 acres) and barren (1 acre). These relative amounts of habitat on the 1,450-acre site are nearly identical between the two documents, with negligible differences due to computer mapping details and rounding of quantities. It is noted that the Draft EIR accounts for approximately one additional acre of barren land that coincides with old Doe Mill Road, which was surveyed in Gallaway's work but not reflected on the computer mapping data layers used for the figures in the BRA.

6-24 This comment notes that the Draft EIR states the project would convert an estimated 200 acres of blue oak foothill pine woodland to development while preserving 80% of the existing oak canopy on site. The comment then compares those statements to the BRA (Appendix C of the Draft EIR), which states that the site contains 485.7 acres blue oak foothill pine habitat. Based on dividing the amounts of acreage, the comment concludes that the project is proposing to convert approximately 40% of the existing blue oak foothill pine habitat to development.

This comment is correct in its approximate calculations; however, it conflates statements made in the Draft EIR regarding the removal of oak canopy versus removal of blue oak foothill pine woodland. Not all oak canopy on site is located within blue oak foothill pine woodland, and not all blue oak foothill pine woodland areas of the site are covered in oak canopy. Oak tree canopy also exists in the valley foothill riparian woodland area and, though sparsely, in the areas mapped as annual grassland. Within the blue oak foothill pine woodland, oak canopy is interspersed with grassland, shrubs and pine trees that also comprise land cover within this vegetation community.

The analysis under Impact 4.3-2 (Draft EIR p. 4.3-58), explains that an estimated 200 acres of the 486 acres of blue oak foothill pine woodland may be converted to permanent development. The analysis also explains that, although approximately 80% of the oak tree canopy would be retained pursuant to VESP policies, the removal of individual trees associated with the VESP would be potentially significant and mitigation measure BIO-9 is necessary to ensure adequate protection of trees slated for preservation.

6-25 This comment references the BRA's description of evaluating oak canopy at the site and notes that the Draft EIR does not contain a figure showing where the "239 acres of oak woodland is located" on the project site. The comment further suggests that direct and indirect impacts to the oak woodland cannot be analyzed without knowing the location of the oak woodland and recommends including a map of the "239 acres of oak woodland."

The technical measurement of "oak canopy" within the project site (i.e., where leaves reflect sunlight, or 239 acres) and discussions of "oak woodland" in the context of a vegetation community or habitat at the site are distinct types of measurements with overlapping subjects. The BRA mapped approximately 486 acres of blue oak foothill pine woodland (or oak woodland) at the VESP site. Using a separate process to serve a separate purpose, the BRA also calculated that there is 239 acres of oak tree canopy at the site. Not all oak canopy on site is located within oak woodland, and not all oak woodland areas are covered in oak canopy. Within the oak woodland, oak canopy is interspersed with grassland, shrubs and pine trees that also comprise land cover within this vegetation community.

The oak canopy evaluation was conducted for the purpose of estimating individual tree removal associated with the proposed specific plan, not for mapping oak woodlands or assessing project impacts to oak woodlands. The 239 acres referenced under this comment refers to the area of the site covered by oak tree canopy under "leaf on" conditions. It was derived by using remote sensing (aerial and/or satellite) imagery to identify the spectral signature of oak trees versus grassland or other land cover types and calculating the portion of the area that is covered in oak tree canopy. A figure depicting the 239 acres of oak canopy would look a lot like the aerial photograph on Figure 2-2 of the Draft EIR, which shows dark spots and dark ribbons of oak trees across the lighter-colored grassland. These dark spots and ribbons, or tree signatures, are visible on several other Figures in the EIR as well, including the Land Use Plan (Figure 2-3), which shows that most of the tree cover on the site coincides with areas set aside as open space.

Project impacts to oak woodlands are described under Impact 4.3-2 (Draft EIR p. 4.3-58), which explains that an estimated 200 acres of the 486 acres of blue oak foothill pine woodland may be converted to permanent development.

6-26 This comment references the "Oak Woodland Mitigation and Monitoring Program," by which it means the Oak Woodland Mitigation and Management Plan (OWMMP) contained in Appendix E of the VESP. Specifically, the comment states that the mitigation ratios for replacement trees that range from 1:1 to 9:1 with differing years for monitoring are inadequate for the replacement of mature native oak trees. The comment also disagrees with the use of tree species other than oaks in medians and parks to mitigate the loss of native oak trees and woodlands. The comment goes on to describe the biological values of oak trees in a woodland setting and notes that replacement trees in medians, parks and recreational areas would not adequately replace the habitat values lost with the removal of oak woodlands. The comment also notes that oak trees have a very slow growth rate and states that the "mitigation ratios proposed by the Draft EIR" would not adequately replace the habitat value lost because replacement oak trees would not attain comparable size and structure for many decades or more. The comment recommends providing an analysis showing that mitigation measure BIO-9 would likely be successful at recreating or restoring the oak woodland lost to project development. Lastly, the comment asserts that the Draft EIR should include specifics regarding where the mitigation trees would be planted, establish success criteria for mitigation plantings, and permanently protect oak mitigation areas with a conservation easement.

This comment appears to be based on a misunderstanding that the tree replacement requirements of the OWMMP are intended to provide the same habitat values as the oak woodland impacts caused by the project. The OWMMP is largely modeled after the City's Municipal Code Chapter 16.66 (Tree Preservation Regulations). The Introduction of the OWMMP states the following: "In establishing these regulations, it is the intent of the Valley's Edge Specific Plan (VESP) to preserve the maximum number of trees possible, with the reasonable use and enjoyment of private property, and to provide for a healthy urban forest that will absorb carbon dioxide, helping reduce urban impacts on global warming."

In other words, the main purpose of the OWMMP is to disincentivize excessive removal of individual trees during the initial phases of project development, and to require replacement trees when removal is necessary or otherwise occurs during project buildout. Where tree preservation is not possible, replacement trees are required to help provide a healthy urban forest that will support carbon sequestration. The OWMMP also offers that replacement trees in the VESP can enhance and/or expand oak woodlands at the project site by selectively planting in open space areas set aside by the Land Use Plan. To avoid this sort of misunderstanding in the future, the name of Appendix E of the VESP will be changed to the "Valley's Edge Tree Preservation Program" (or VETPP).

The OWMMP/VETPP is part of the overall VESP (proposed project), and it would be implemented in tandem with zoning designations and land use restrictions found elsewhere in the VESP. The VESP open space designations on the Land Use Plan protect and conserve most oak woodlands on the project site. The Program allows for replacement trees to be planted both in urban settings during project development and in the large open space areas with aims to enhance oak canopy coverage in the large open space areas over time. There are no mitigation ratios for oak trees in the Draft EIR; the comment is likely referring to the tree replacement ratios contained in the proposed OWMMP/VETPP. The replacement ratios and requirements of the OWMMP/VETPP are not necessarily intended to recreate or restore oak woodland habitat, though implementation of the Plan may result in those effects.

Regarding the Draft EIR, project impacts to sensitive natural communities are described under Impact 4.3-2 (Draft EIR p. 4.3-58), which states that an estimated 200 acres of the 486 acres of blue oak foothill pine woodland (oak woodland) may be converted to permanent development. This loss of approximately 200 acres of oak woodland is not considered a significant impact because the blue oak foothill pine woodland vegetation community is not considered a sensitive natural community as explained in the Draft EIR on pages 4.3-57 and 4.3-58.

No analysis of the effectiveness of mitigation measure BIO-9 to recreate or restore oak woodlands removed by the project is required because the purpose of mitigation measure BIO-9 is to ensure that individual trees slated for preservation are adequately protected during construction activities. Similarly, identifying the specific area(s) for planting replacement trees and protecting that area with a conservation easement is not necessary because the replacement trees are not required to recreate or restore oak woodland habitat.

Many of the replacement trees required by the OWMMP/VETPP would occur in areas of the site proposed for Valley Open Space (267 acres) and Regional Open Space (420 acres) zoning, targeting areas in those districts where the existing oak canopy is sparse or absent. To compensate for the removal of qualifying trees during development, the OWMMP/VETPP requires each six-inches of tree diameter removed to be replaced with one 15-gallon tree monitored for three years, one and one-half 5-gallon trees monitored for five years, or nine germinated acorns monitored for ten years.

The option of planting younger oak saplings and germinated acorns into the ground was sought to optimize natural tap root growth patterns and minimize tap root girdling which can occur in nursery containers, possibly compromising the long-term success of the tree. After ten years of monitoring the success of a former acorn, the mitigation is anticipated to result in an established young tree. If a replacement acorn, sapling, or tree dies before its monitoring period expires then the permittee shall be responsible for replacing it for another, with a new associated monitoring period. Note: the OWMMP/VETPP contains a drafting error in that the accompanying text only refers to three years of monitoring and should refer to the monitoring periods contained in the table (which lists the three different monitoring periods described above in this paragraph). As noted above, existing and replacement trees in the Valley Open Space and Regional Open Space areas of the site would enjoy land use protections inherent of the zoning limitations. See additional information about the exceptions listed in the OWMMP/VETPP in Response to Comment 6-27, below.

6-27 This comment refers to the OWMMP/VETPP and states that the City does not have an in-lieu fee program for oak woodlands and the OWMMP/VETPP does not specify that fees collected would go toward mitigating impacts to oak woodland. Further, the comment states that no in-lieu fee amount is specified by the OWMMP/VETPP, the number of trees to be planted off-site is not specified, and sites elsewhere in the city are not identified for the planting of new oak trees. The comment notes that the Draft EIR does not analyze the feasibility of an off-site tree replacement program. The comment also points out that the Regeneration Banking option in the OWMMP/VETPP does not specify the locations of where oak trees would be planted and recommends that the Draft EIR provide additional details for the implementation of the Regeneration Banking as an oak woodland mitigation option. The second paragraph of this comment expresses concern over the exemptions in the OWMMP/VETPP, which include trees removed to reduce wildfire risks, and trees in open space areas. The comment notes that the Draft EIR does not contain information about how many

trees the exemptions may apply to, and therefore an accurate assessment of the significance of the exemptions on existing oak woodlands cannot be performed. The comment concludes by recommending that all trees impacted by the project be mitigated.

As noted in Response to Comment 6-26, the main purpose of the OWMMP/VETPP is to disincentivize the excessive removal of individual trees during the phases of initial project development and is not intended to necessarily provide replacement oak woodland habitat to compensate for the loss of oak woodlands from project development. Project impacts to sensitive natural communities are described under Impact 4.3-2 (Draft EIR p. 4.3-58), which explains that an estimated 200 acres of the 486 acres of blue oak foothill pine woodland (oak woodland) may be converted to permanent development. This loss of approximately 200 acres of blue oak foothill pine woodland is not considered a significant impact because blue oak foothill pine woodland is not considered a sensitive natural community, as explained in the Draft EIR.

Therefore, the in-lieu fees for the removal of individual trees need not be used to replace or compensate for loss of oak woodlands from the project, and off-site locations in the city that would serve that specific purpose are not required. It is anticipated that in-lieu fees for tree removal in VESP would either (1) be deposited into the city's street tree fund, as are the in-lieu fees collected under Chico Municipal Code Chapter 16.66, to finance the succession planting of street trees elsewhere in the city, or (2) go toward tree planting efforts exclusively within the VESP site if specified by a development agreement or other requirement. In April 2022, the City's in-lieu fee was \$530.50 per six-inches of diameter removed.

Regarding the exemptions in the OWMMP/VETPP for trees removed to reduce wildfire risks and trees removed in open space areas, both these exemptions will be removed from the OWMMP/VETPP. It is anticipated that tree removal associated with those activities will be minimal because vegetation management to reduce wildfire risk will mostly involve non-qualifying (smaller) vegetation, and trail construction activities typically avoid direct conflicts with trees. Removing these exemptions will enhance internal consistency for the VESP, which contains a goal to preserve and renew oak woodlands within the project site (Goal PROS-6).

6-28 The comment requests that any survey information associated with the EIR be reported to the California Natural Diversity Database.

That request has been provided to the biological consulting firm that conducted the surveys at the project site.

6-29 The comment refers to payment of filing fees, which is required upon submission of the Notice of Determination (NOD).

All required fees will be paid when the NOD is filed with the County Clerk.

6-30 The comment requests written notification of all actions and decisions made regarding the project.

The City will provide notices as requested in compliance with CEQA, and for future discretionary decisions by the City for the Valley's Edge development (e.g.: tentative maps, use permits, etc.).

6-31 The comment concludes the project will result in significant impacts and requests responses to this letter be provided and requests to be consulted to ensure the project adequately mitigates potential impacts.

The comment is noted. The City has addressed CDFW's concerns raised in their comment letter in the above responses, which have been provided to CDFW. The City and the project applicant have consulted with CDFW to ensure impacts to biological resources are adequately mitigated.

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Comment Letter 7

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Altacal Audubon's Mission is to promote the awareness, appreciation, and protection of native birds and their habitats through education, research, and environmental activities. It is for this reason that we provide here our assessment of the potential and likely impacts of development into the Doe Mill/Honey Run Special Planning Area and specifically the proposed Valley's Edge Subdivision.

The impacts of development into private grasslands and forests adjacent to the traditional borders of urban areas are well documented. In the Forest Service publication entitled *Forests on the Edge* the authors note:

"Private forests provide critical habitat for many species. Increased housing development on rural private forests can have many implications for at-risk species. Populations of at-risk species may disappear, decline, or become more vulnerable with changes in the presence and distribution of private forest habitats (Robles et al., in press). Loss of habitat is highly associated with at-risk species that have declining populations, and it presents the primary obstacle for their recovery (Donovan and Flather 2002, Kerr and Deguise 2004). Decreases in habitat quality associated with housing development and roads can lead to declines in biodiversity (Houlahan et al. 2006), creation of barriers to movement (Jacobson 2006), and increases in predation (Kurki et al. 2000, Woods et al. 2003). Habitat degradation can also contribute to declines in fish numbers (Ratner et al. 1997)."

Grassland birds have declined by 53% since 1970 and 74% of grassland species are declining throughout North America (Rosenberg, et. al. 2019). Between 2001 and 2011, [Butte] County lost 5.645 acres of natural areas to development (Conservation Science Partners) and many grasslands are being lost to agriculture and urban development (Eviner, 2017).

While the draft EIR for Valley's Edge subdivision cites Special-Status Avian Species Occurrences on and off the project site, it contains flaws including.

1. Crit	eria used to identify avian species of conservation concern are of limited scope. Not included are:
	- Numerous species found on the subject property identified on the U.S. Fish and Wildlife Service Birds of
	Conservation Concern 2021 (https://www.fws.gov/migratorybirds/pdf/management/birds-of-
	conservation-concern-2021.pdf).
	- Species found on the subject property, identified as California Bird Species of Special Concern
	(https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=84247&inline).

- A significant number of species found on the subject property identified by Cornell Lab of Ornithology as *bird species at significant risk* or *common bird species in steep decline*.

-Various species found on the subject property are considered vulnerable on the **2016 State of North America's Birds' Watch List**

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2. Visitations by the Environmental Consultants failed to identify numerous species of concern (per the criteria in item #1 above) that are regularly reported present on the property to Cornell Lab of Ornithology's eBIRD site, including the following:

WHITE-TAILED KITE

eBird Observation Potter Road 2021 https://ebird.org/hotspot/L11905637

White-tailed Kites are relatively common, but <u>their populations declined by 36% between 1970 and 2014</u>, according to Partners in Flight. The estimated global breeding population is 2 million. The species rates a 10 out of 20 on the Continental Concern Score, which means it is not on the Partners in Flight Watch List and is a species of low conservation concern. In the early 1900s White-tailed Kite populations dropped significantly due to habitat loss, shooting, and egg collection. Since then, populations have rebounded somewhat, although <u>long-term trends</u> suggest continued declines. Urban and suburban development can reduce the number of nest sites as well as prey abundance. Modern farming techniques can also reduce vegetation that its prey use for cover. In a conservation effort in northern California, the California Department of Fish and Game set aside grazed pastures and allowed them to return to grassland; they now support about 10 times the number of raptors, including White-tailed Kites, as before the program began.

LEWIS' WOODPECKER

USFS Birds of Conservation Concern ebird Observation Potter Road 2021 <u>https://ebird.org/hotspot/L11905637</u> eBird Observation N.E. end Potter Rd 2021 <u>https://ebird.org/hotspot/L11905584</u>

Lewis's Woodpeckers are uncommon and their *populations declined by 72% between 1970 and 2014*, according to Partners in Flight. *Due to their declining population, they rate a 15 out of 20 on the Continental Concern Score, placing them on the Yellow Watch List.* The current estimated global breeding population according to Partners in Flight is 69,000 individuals. Lewis's Woodpeckers are threatened by changing forest conditions as a result of fire suppression, grazing, and logging as well as climate change. Fire suppression, logging, and grazing often result in higher densities of single age pines and fewer standing dead or decaying trees available for nesting.

EVENING GROSBEAK

2016 State of North America's Birds' Watch List eBird Observation Potter Road 2021 https://ebird.org/hotspot/L11905637

Evening Grosbeaks are numerous and widespread, but *populations dropped steeply between 1966 and 2015*, according to the North American Breeding Bird Survey—particularly in the East where numbers declined by 97% during that time. Partners in Flight estimates a global breeding population of 4.1 million, with 71% spending some part of the year in the U.S., 57% in Canada, and 5% living in Mexico. Evening Grosbeak rates a 13 out of 20 on the Continental Concern Score and is on the 2016 State of North America's Birds' Watch List, which includes bird species that are most at risk of extinction without significant conservation actions to reverse declines and reduce threats. Because of their irruptive nature, it can be difficult for large-scale surveys to make precise estimates, but a 2008 study of Project FeederWatch data found that the grosbeak's winter range had contracted and numbers had declined. Evening Grosbeaks were reported at only half the number of sites, and flock sizes were down by 27%, in the early 2000s compared with the late 1980s. Recent declines may be due to logging and other



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estimates a global breeding population of 120 million, with 62% spending some part of the year in the US., 17% in Canada, and 9% wintering in Mexico. The species rates a 9 out of 20 on the Continental Concern Score. Horned Lark is not on the 2016 State of North America's Birds' Watch List, but the 2014 State of the Birds Report listed it as a <u>Common Bird in Steep Decline</u>. Loss of agricultural fields to reforestation and <u>development, and human</u> <u>encroachment on the birds' habitat, are factors in their decline</u>—but the overall declining trend is not fully understood.

NORTHERN HARRIER

California Species of Special Concern USFS Birds of Conservation Concern eBird Obervation Potter Road 2018 https://ebird.org/hotspot/L11905637

Northern Harriers are fairly common, but their *populations are declining. The North American Breeding Bird Survey records a steady decline of over 1% per year from 1966 to 2014, resulting in a cumulative loss of 47%,* with Canadian populations declining more than U.S. populations. Partners in Flight estimates the global breeding population at 1.4 million, with 35% spending some part of the year in the US., 17% in Canada, and 10% in Mexico. They rate an 11 out of 20 on the Continental Concern Score and are not on the 2014 State of the Birds Report. *Habitat loss has contributed to reduced harrier populations* as people have drained wetlands, developed land for large-scale agriculture, and allowed old farmland to become reforested. The small mammals that harriers prey upon have been reduced because of overgrazing, pesticides, and reduced shrub cover from crop field expansion. Because they eat small mammals, Northern Harriers are susceptible to the effects of pesticide buildup as well as direct effects by eating poisoned animals. In the mid-twentieth century their populations declined from contamination by DDT and other organochlorine pesticides, but rebounded after DDT restrictions went into effect in the 1970s. Northern Harriers have been mostly safe from hunting because of their reputation for keeping mouse populations in check, but they are still sometimes shot at communal winter roosts in Texas and the southeastern United States.

BURROWING OWL

California Species of Special Concern USFS Birds of Conservation Concern eBird Observation Potter Road <u>https://ebird.org/hotspot/L11905637</u> eBird Observation N.E. end Potter Rd 2021 https://ebird.org/hotspot/L11905584

Burrowing Owls are still numerous, but *populations declined by about 33% between 1966 and 2015, according to the North American Breeding Bird Survey*. Declines have been particularly sharp in Florida, the Dakotas, and coastal California. Partners in Flight estimates a global breeding population of 2 million, with 31% spending some part of the year in the U.S., and 15% in Mexico. The species rates a 12 out of 20 on the Continental Concern Score and is not on the 2016 State of the Birds Watch List. The species is listed as Endangered in Canada and as a species with Special Protection in Mexico. Agriculture and *development have significantly diminished the colonies of prairie dogs and other burrowing animals where Burrowing Owls once nested by the hundreds*. Pesticides, collisions with vehicles, shooting, entanglement in loose fences and similar manmade hazards, and hunting by introduced predators (including domestic cats and dogs) are also major sources of mortality. At the same time, Burrowing Owls have benefited from protective legislation, reintroduction and habitat protection programs, and artificial nest burrows. Because they do not require large uninterrupted stretches of habitat, these owls can Cont benefit from the protection of relatively small patches of suitable land. LOGGERHEAD SHRIKE California Species of Special Concern 2014 State of the Birds Report lists them as a Common Bird in Steep Decline eBird Observation Potter Road 2008 https://ebird.org/hotspot/L11905637 Loggerhead Shrikes are still fairly numerous in some areas (particularly the South and West), but their populations have fallen sharply. Between 1966 and 2015, the species declined by almost 3% per year, resulting in a cumulative decline of 76%, according to the North American Breeding Bird Survey. Partners in Flight estimates the global breeding population is 5.8 million, with 82% spending some part of the year in the U.S., 30% in Mexico, and 3% breeding in Canada. The species rates an 11 out of 20 on the Continental Concern Score, and 7-11 the 2014 State of the Birds Report lists them as a Common Bird in Steep Decline. Loggerhead Shrikes have been listed as endangered, threatened, or of special concern in several states and Canada, and have been proposed for federal listing (the subspecies that nests on San Clemente Island, California, is listed as endangered). The species' decline coincides with the introduction and increased use of chemical pesticides between the 1940s and the 1970s, and may result in part from the birds' ingestion of pesticide-laced prey from treated fields. Other likely causes of population decline include collision with vehicles, urban development, conversion of hayfields and pastureland, decimation of hedgerows, habitat destruction by surface-coal strip-mining, and altering of prey populations by livestock grazing. Given this bird's potentially high reproductive rate, and provided that adequate habitat continues to be available, Loggerhead Shrike populations may be able to recover if the causes of the bird's decline can be identified and eliminated. YELLOW-BILLED MAGPIE State of North American Birds Watch List eBird Observation Potter Road 2008 https://ebird.org/hotspot/L11905637 According to the North American Breeding Bird Survey, Yellow-billed Magpie populations declined by an estimated 2.9% per year between 1968 and 2015, resulting in a cumulative decline of 76% during that period. 7-12 Partners in Flight estimates a global breeding population of 110,000, rates the species a 16 out of 20 on the Continental Concern Score, and includes it on the Yellow Watch List for species with restricted range. Yellowbilled Magpies are still sometimes trapped and shot in rural areas, especially cattle operations. They have also declined precipitously in areas where rodenticides were used. During the height of the West Nile virus epidemic, in the early 2000s, scientists estimate that Yellow-billed Magpies lost half their population. Perhaps the greatest threat to the existence of this species is habitat lost to development in California's populous Central Valley.

Respectfully,

Mary Muchowski Executive Director <u>Director@altacal.org</u> Altacal Audubon Society PO Box 3671 Chico, CA 95927 (530) 592-9092

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4.2 Response to Organization Comments

Response to Letter 7

Altacal Audubon Society (Mary Muchowski, Executive Director)

7-1 The comment excerpts a portion of a Forest Service publication summarizing effects of development of grasslands and forests at the edges of urban areas. The comment also cites references that describe declines in grassland species within California and the level of development in Butte County.

The comment is noted and will be forwarded to the decision makers for their consideration.

7-2 The comment states that the Draft EIR did not include as "special-status" various bird species that are included on lists maintained by the USFWS, CDFW, Cornell Lab of Ornithology, and the U.S. Committee of the North American Bird Conservation Initiative.

As noted in the Draft EIR on page 4.3-17, "[s]pecial-status wildlife species are those that are designated as either rare, threatened, or endangered (or candidates for designation) by CDFW or the USFWS; are protected under either the CESA or the ESA; meet the California Environmental Quality Act (CEQA) definition for endangered, rare, or threatened (14 CCR 15380[b],[d]); are considered fully protected under the California Fish and Game Code, Sections 3511, 4700, 5050, and 5515; or that are on the CDFW Special Animals List (CDFW 2019b) and determined by CDFW to be a Species of Special Concern". These lists are based on a rigorous scientific analysis of the threat to species as determined by the Fish and Game Commission.

Inclusion of species beyond these, including those on some of the lists cited in the comment, is at the discretion of the CEQA lead agency. Refer to Responses to Comments 7-3 through 7-12 for additional information.

7-3 The comment states that White-tailed kite have been documented on or near the project site according to the Cornell Lab of Ornithology's eBIRD site and provides a summary of conservation information for the species.

Although the Draft EIR does not rely on results from citizen-science websites such as eBIRD, the commenter is correct that White-tailed kite has at least a moderate likelihood of occurrence on the project site. Because this species is California Fully Protected, it is considered a special-status species in the EIR and a description of the species has been added to page 4.3-19 of the Draft EIR in the environmental setting (Section 4.3.1) and to page 4.3-51 under Impact 4.3-1. Please see Chapter 3, Changes to the Draft EIR for the new language.

7-4 The comment states that Lewis' woodpecker has been documented on or near the project site according to the Cornell Lab of Ornithology's eBIRD site and provides a summary of conservation information for the species.

This species was not detected on the project site during site-wide surveys or incidentally during other biological resource investigations (Draft EIR Appendix C). Because this species is not considered special-status based on the criteria described in the Draft EIR and in Response to

Comment 7-2, it is not included in the analysis of impacts to special-status species. However, all migratory birds are protected under the Migratory Bird Treaty Act, and impacts on all nesting birds, including Lewis' woodpecker, are addressed in Impact 4.3-2 and mitigation measure BIO-2, Nesting Bird Surveys.

7-5 The comment states that evening grosbeak have been documented on or near the project site according to the Cornell Lab of Ornithology's eBIRD site and provides a summary of conservation information for the species.

This species was not detected on the project site during site-wide surveys or incidentally during other biological resource investigations (Draft EIR Appendix C). Please see Responses to Comments 7-2 and 7-4.

7-6 The comment states that oak titmouse has been documented on or near the project site according to the Cornell Lab of Ornithology's eBIRD site and provides a summary of conservation information for the species.

This species was documented as occurring on the project site during site-wide surveys (Draft EIR Appendix C). Please see Responses to Comments 7-2 and 7-4.

7-7 The comment states that Brewer's blackbird has been documented on or near the project site according to the Cornell Lab of Ornithology's eBIRD site and provides a summary of conservation information for the species.

This species was not detected on the project site during site-wide surveys or incidentally during other biological resource investigations (Draft EIR Appendix C). Please see Responses to Comments 7-2 and 7-4.

7-8 The comment states that horned lark has been documented on or near the project site according to the Cornell Lab of Ornithology's eBIRD site and provides a summary of conservation information for the species.

This species was not detected on the project site during site-wide surveys or incidentally during other biological resource investigations (Draft EIR Appendix C). Please see Response to Comment 7-4.

7-9 The comment states that northern harrier has been documented on or near the project site according to the Cornell Lab of Ornithology's eBIRD site and provides a summary of conservation information for the species.

This species was not detected on the project site during site-wide surveys or incidentally during other biological resource investigations (Draft EIR Appendix C). Although the Draft EIR does not rely on results from citizen-science websites such as eBIRD, the commenter is correct that northern harrier has at least a moderate likelihood of occurrence on the project site. Because this species is a California Species of Special Concern, it is considered as special-status species in the EIR and a species description has been added to page 4.3-19 of the Draft EIR in the environmental setting and under Impact 4.3-1 on page 4.3-51. Please see Chapter 3, Changes to the Draft EIR for the new language.

7-10 The comment states that burrowing owl have been documented on or near the project site according to the Cornell Lab of Ornithology's eBIRD site and provides a summary of conservation information for the species.

This species is considered in the Draft EIR as highly likely to occur on the project site and the Draft EIR notes in Section 4.3.1 on page 4.3-20, that active burrows and adult burrowing owls were observed on the project site in 2006.The Draft EIR considers impacts to burrowing owl to be potentially significant, as described in Section 4.3. Mitigation measure BIO-3 in the Draft EIR is targeted at avoiding and substantially reducing potential effects to burrowing owl to the extent feasible.

7-11 The comment states that loggerhead shrike has been documented on or near the project site according to the Cornell Lab of Ornithology's eBIRD site and provides a summary of conservation information for the species.

This species was not detected on the project site during site-wide surveys or incidentally during other biological resource investigations (Draft EIR Appendix C). This species is considered in the Draft EIR as moderately likely to occur on the project site. The Draft EIR notes in Section 4.3.1 on page 4.3-27 that eBIRD records documented the species near the site in 2019. The Draft EIR considers impacts to loggerhead shrike to be potentially significant, as described in Section 4.3. Mitigation measure BIO-2 in the Draft EIR is targeted at avoiding and substantially reducing effects to nesting birds, including loggerhead shrike, to the extent feasible.

7-12 The comment states that yellow-billed magpie has been documented on or near the project site according to the Cornell Lab of Ornithology's eBIRD site and provides a summary of conservation information for the species.

This species was not detected on the project site during site-wide surveys or incidentally during other biological resource investigations (Draft EIR Appendix C). Please see Responses to Comments 7-2 and 7-4.

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