Because life is good.



April 11, 2025

Sent via email

Monterey County Board of Supervisors 168 West Alisal St. 1st Floor Salinas CA 93901 cob@countyofmonterey.gov

Re: Harper Canyon (Encina Hills) Subdivision Project Final Supplemental Environmental Impact Report SCH# 2003071157

Dear Supervisors,

These comments are submitted on behalf of the Center for Biological Diversity (the "Center") regarding the Harper Canyon (Encina Hills) Subdivision Project ("Project"). The Center has reviewed the Final Environmental Impact Report ("FEIR") closely and urges the Board not to approve a Project with such significant impacts based on such a flawed environmental review process. The EIR's recirculated discussion of wildlife connectivity fails to adequately discuss or mitigate significant impacts to a crucial wildlife connectivity area. The EIR's discussion of other impacts—especially impacts to water, wildfire, and transportation—relies on information that is out of date and insufficient to properly disclose the impacts of this Project in the current climate. The Center urges the County to refrain from approving the Project until it has remedied these issues and revised the EIR.

The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and the United States. The Center has worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in Monterey County.

Numerous commenters, including Pathways for Wildlife, the Meyer Community Group, and the California Department of Fish and Wildlife ("CDFW") submitted comments to the County identifying serious flaws in the Draft Environmental Impact Report ("DEIR"), including but not

limited to the DEIR's analysis of biological resources. Unfortunately, the FEIR did not correct the deficiencies in the DEIR and/or Project.

I. THE EIR FAILS TO ADEQUATELY ASSESS AND MITIGATE THE PROJECT'S IMPACTS TO WILDLIFE CONNECTIVITY AND SPECIAL-STATUS SPECIES.

The California Environmental Quality Act (CEQA) requires an EIR to provide decisionmaking bodies and the public with detailed information about the effect a proposed project is likely to have on the environment, to list ways in which the significant effects of a project might be minimized, and to indicate alternatives to the project. (Pub. Res. Code § 21061.) CEQA further requires a lead agency to mitigate to the extent feasible significant impacts. (CEQA Guidelines § 15064.4.) The EIR fails to provide sufficient analyses and mitigation for the Project's potential impacts to wildlife connectivity and special-status species that rely on connected habitats in and near the Project area, including mountain lions, California tiger salamanders, and California red-legged frogs, and therefore fails to comply with CEQA. A recirculated EIR that complies with CEQA must be prepared.

After the 2015 EIR's discussion of wildlife connectivity was deemed inadequate, the County was charged with recirculating a new EIR that would fully consider, analyze, disclose, and mitigate impacts to wildlife connectivity. The County has not fulfilled that responsibility.

A. The EIR Fails to Adequately Assess and Disclose the Project's Impacts to Wildlife Connectivity and Special-status Species.

The EIR fails to adequately assess and disclose the Project area's importance for wildlife connectivity. The Project area's proximity to the El Toro Creek underpass on SR 68 makes the area critical for regional wildlife connectivity. Although the EIR acknowledges the importance of the undercrossing at El Toro Creek on SR 68 and that wildlife routinely use the undercrossing, the EIR fails to mention that numerous experts, including biologists at the California Department of Fish and Wildlife (CDFW), have identified the critical need for the continued presence of high-quality intact habitat on both sides of the undercrossing so that wildlife continue to use it. The Project area is located in a critical pinch point of wildlife movement between the Fort Ord National Monument and the Sierra de Salinas. Fragmentation of this area could sever important connectivity for wildlife populations that have been documented in and near the Project area on both sides of the SR 68, including special-status species like mountain lions (CESA candidates), California tiger salamanders (federally threatened), California red-legged frogs (federally threatened), coast range newts (species of special concern), and southwestern pond turtle

April 11, 2025 Page 2 (species of special concern) (e.g., Diamond et al., 2010; Pathways for Wildlife, 2017). This is all important information to consider when assessing the Project's impacts to wildlife connectivity.

The EIR fails to disclose that the Project area is located in some of the last remaining, large, intact areas of undisturbed habitat in the region. According to experts, "[o]f the entire border of Fort Ord, this is the only remaining connection with large enough tracts of suitable habitat for a wide range of species" (Diamond et al., 2010). CDFW has designated the area as having the highest ranking for "terrestrial irreplaceability" and "terrestrial climate change resilience" in their Areas of Conservation Emphasis (ACE) Project.¹ These designations highlight that the Project area is within a mosaic of highly unique habitat areas that support California rare endemic and near-endemic species and provide refugia from climate change. This is important to consider when assessing the Project's impacts to wildlife connectivity because fragmentation of such areas could degrade and drastically alter these critical ecosystems, render them unsuitable for sensitive species, and significantly reduce the area's climate resilience. The EIR fails to adequately assess and disclose the existing conditions of the Project area's importance for wildlife connectivity.

Although the EIR includes a wildlife camera study, the study does not encompass the wide breadth of species and the varying types of connectivity that they need to survive. For example, the EIR fails to adequately assess and mitigate the Project's impacts to semi-aquatic species and the connectivity they require connectivity between terrestrial and aquatic habitats, like amphibians and reptiles. New roads and increased traffic can have devastating impacts on these small, slow-moving animals. Thousands of roadkill newts are documented every rainy season on just a 3-mile stretch of road in Santa Clara County, and scientists calculated at 39.2% mortality rate, estimating that the population could become extirpated in about 57 years if connectivity for the newts is not improved (HT Harvey & Associates, 2021). Biologists at the U.S. Geological Survey found that southwestern pond turtles, California tiger salamanders, California red-legged frogs, and coast range newts, all species that are known or have the potential to occur in and near the Project area, have very high risk of extirpation from road-related impacts (Brehme et al., 2018).

Many amphibians and reptiles have been found to migrate over 1,000 feet between aquatic and terrestrial habitats through multiple life stages (Cushman, 2006; Fellers & Kleeman, 2007; Semlitsch & Bodie, 2003; Trenham & Shaffer, 2005). For example, California red-legged frogs have been found roaming over 4,500 feet from the water (Fellers & Kleeman, 2007). California tiger salamanders and newts have been documented traveling more than one mile from breeding ponds 1.3 miles (Orloff, 2011; Trenham, 1998). Southwestern pond turtle nests have been found up to 1,919 feet from aquatic habitats and individuals have been documented to

¹ CDFW. (2025). Areas of Conservation Emphasis. Available at: <u>https://wildlife.ca.gov/Data/Analysis/ACE</u>

move regularly between aquatic habitats with long-distance movements of up to 2,018 feet (Sloan, 2012). Yet the analyses did not include any targeted surveys for these species or potential breeding habitat in and near the Project area. The EIR fails to adequately assess and disclose the Project's impacts to herpetofauna connectivity.

As detailed in a 2021 Center Report (Yap, Rose, Anderson, et al., 2021), roads and development create barriers that lead to habitat loss and fragmentation, which harms native wildlife, plants, and people. As barriers to wildlife movement, poorly-planned development and roads can affect an animal's behavior, movement patterns, reproductive success, and physiological state, which can lead to significant impacts on individual wildlife, populations, communities, landscapes, and ecosystem function (Brehme et al., 2013; Ceia-Hasse et al., 2018; Haddad et al., 2015; Marsh & Jaeger, 2015; Mitsch & Wilson, 1996; Trombulak & Frissell, 2000; van der Ree et al., 2011). For example, habitat fragmentation from roads and development has been shown to cause mortalities and harmful genetic isolation in mountain lions in Southern California and along the Central Coast (Ernest et al., 2014; Gustafson et al., 2021; Riley et al., 2014; Vickers et al., 2015), increase local extinction risk in amphibians and reptiles (Brehme et al., 2018; Cushman, 2006)., cause high levels of avoidance behavior and mortality in birds and insects (Benítez-López et al., 2010a; Kantola et al., 2019; Loss et al., 2014), and alter pollinator behavior and degrade habitats (Aguilar et al., 2008; Goverde et al., 2002; Trombulak & Frissell, 2000).

Habitat loss and fragmentation also severely impacts plant communities. An 18-year study found that reconnected landscapes had nearly 14% more plant species compared to fragmented habitats, and that number is likely to continue to rise as time passes (Damschen et al., 2019). The authors conclude that efforts to preserve and enhance connectivity will pay off over the long-term (Damschen et al., 2019). In addition, connectivity is important to allow for range shifts and species migrations as climate changes (Cushman et al., 2013; Heller & Zavaleta, 2009; Krosby et al., 2018). Loss of wildlife connectivity decreases biodiversity and degrades ecosystems. It also prevents the reestablishment of native species, like bald eagles, vernal pool fairy shrimp, and valley elderberry longhorn beetles that may occur in or near the Project area.

Edge effects like traffic, noise, and light from Project construction and operation will have impacts on wildlife and wildlife movement in an area that is already constrained. This is important to consider when open space and connectivity enhancement projects (i.e., a wildlife crossing project in the CDFW priority barrier at El Casco Creek) are nearby, as numerous wildlife have been found to be sensitive to edge effects. For example, field observations and controlled laboratory experiments have shown that traffic noise can significantly degrade habitat value for migrating songbirds (Ware et al., 2015). Subjects exposed to 55 and 61 dBA (simulated traffic noise) exhibited decreased feeding behavior and duration, as well as increased vigilance behavior (Ware et al. 2015). Such behavioral shifts increase the risk of starvation, thus

decreasing survival rates. Another study found a 28% decrease in bird abundance in areas when traffic noise was present compared to when there was no traffic noise (McClure et al., 2013). Negative edge effects of roads and development have been documented in wide-ranging predators, such as mountain lions and bobcats (Crooks, 2002; Delaney et al., 2010, 2021; Lee et al., 2012; Riley et al., 2006; Smith et al., 2015), as well as smaller species with poor dispersal abilities, such as song birds, small mammals, and herpetofauna (Benítez-López et al., 2010a; Cushman, 2006; Kociolek et al., 2011; Slabbekoorn & Ripmeester, 2008).

It is widely recognized that the continuing fragmentation of habitat by humans threatens biodiversity and diminishes our (humans, plants, and animals) ability to adapt to climate change. In a report for the International Union for Conservation of Nature (IUCN), world-renowned scientists from around the world stated that "[s]cience overwhelmingly shows that interconnected protected areas and other areas for biological diversity conservation are much more effective than disconnected areas in human-dominated systems, especially in the face of climate change" and "[i]t is imperative that the world moves toward a coherent global approach for ecological connectivity conservation, and begins to measure and monitor the effectiveness of efforts to protect connectivity and thereby achieve functional ecological networks" (Hilty et al., 2020).

B. The EIR Fails to Adequately Mitigate the Project's Impacts to Wildlife Connectivity and Special-status Species.

The EIR fails to mitigate the Project's impacts to wildlife connectivity to less than significant. Although Mitigation Measure 3.3-8f states that "the owner/applicant shall submit a Wildlife Corridor Plan (WCP) for all the lots on the vesting tentative map," the measure is vague, unenforceable, and improperly deferred mitigation (see San Joaquin Raptor Rescue Center v. County of Merced (2007) 149 Cal.App.4th 645, 670 [EIR inadequate where the success or failure of mitigation efforts "may largely depend upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR"]). In the limited circumstances in which deferred mitigation is appropriate, the agency must meet all of the following elements: (1) practical considerations prevented the formulation of mitigation measures during the planning process; (2) the agency committed itself to developing mitigation measures in the future; (3) the agency adopted specific performance criteria prior to project approval; and (4) the EIR lists the mitigation measures to be considered, analyzed, and possibly incorporated into the mitigation plan. (See POET, LLC v. State Air Resources Bd. (2013) 218 Cal.App.4th 681, 736-37 [review denied].) Here, the EIR fails to meet these criteria. The lack of adequate details regarding mitigation measures being readily provided for wildlife connectivity, does not allow the public and decisionmakers to evaluate the mitigation measures being taken; therefore. The EIR violates CEQA.

The Project area consists of nine water features and upland habitat that could provide important live-in, breeding, or move-through habitat for California tiger salamanders, California red-legged frogs, coast range newts, and southwestern pond turtles. Mitigation Measure 3.3-8a states that "the applicant shall design the proposed development on the project site so that homesites, landscaped areas, and outbuildings are located a minimum of 75 to 100 feet from active drainage channels" (SDEIR at 3.3-20); however, these buffers are grossly insufficient. As mentioned above, these species can travel distances far beyond 100 feet from aquatic sources. Accommodating the more long-range dispersers is vital for healthy gene flow, continued survival of species populations and recolonization following a local extinction (Cushman, 2006; Semlitsch & Bodie, 2003). In addition, more extensive buffers provide resiliency in the face of climate change-driven alterations to these habitats, which will cause shifts in species ranges and distributions (Cushman et al., 2013; Heller & Zavaleta, 2009; Warren et al., 2011). This emphasizes the need for sizeable upland buffers around aquatic resources, even if ephemeral, as well as connectivity corridors between heterogeneous habitats. The proposed buffers do not mitigate the Project's impacts to wildlife connectivity to less than significant.

II. APPROVING THE PROJECT BASED ON OBSOLETE AN EIR VIOLATES CEQA.

The County contends that because the recently prepared Supplemental Draft Environmental Impact Report (SDEIR) addresses the specific wildlife corridor deficiency, no further environmental review beyond the scope of that issue is required for the Project. This position is incorrect and violates CEQA: The law makes plain that even when a certified EIR is in effect (here, the EIR first prepared in 2008, effectively finalized in 2013 and certified in 2015) an agency must prepare subsequent or supplemental environmental review when either (1) substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report or (2) new information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available. (Pub. Res. Code § 21166.) Considering that well over a decade has passed since the underlying analysis for the 2015 EIR was conducted, the County must take into account substantial changes and significant new information and changes within the project site and nearby render the 2015 EIR's conclusions in these areas inaccurate and require further environmental review.

A. New Information Regarding the Plight Of Central Coast Mountain Lions Has Emerged Since the EIR Was Certified in 2015.

New information since the EIR was approved in 2015 shows that mountain lions in the Project area are facing an extinction vortex fits within both of these categories. Mountain lions in the Project area are part of the Central Coast Central (CCC) population, which were granted

"candidacy status" in April 2020 under CESA, such that they are afforded the same protections as other CESA-listed species. CEQA requires a "mandatory finding of significance" when a project has the potential to impact a CESA-listed species. (CEQA Guidelines § 15065(a)(1); *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 792 fn. 12.) And such a finding triggers a duty to consider and adopt all feasible alternatives or mitigation measures to reduce such impacts. (Pub. Res. Code § 21002.) Moreover, under CESA, the County may not approve projects that could jeopardize the continued existence of these populations or result in destruction of essential habitat (Fish & Game Code § 2053(a)) and agencies must require that appropriate mitigation measures be implemented for projects that could destroy mountain lion habitat or impair connectivity (Fish & Game Code § 2054). Neither the 2015 EIR nor the 2025 supplemental EIR address these issues. Given that mountain lions were recorded in the Project area 52 times within a span of just six months (see Table 3.3-2 at SDEIR 3.3-13), adequate analyses and mitigation regarding the Project's impacts to mountain lions should be provided in a recirculated EIR.

i. Recent Scientific Studies Reveal That Mountain Lions in the Project Area are Threatened and the Project will Further Harm This Population.

By way of background, continued habitat loss and fragmentation has led to 10 genetically isolated populations within California (Gustafson et al., 2018, 2021). There are six identified mountain lion populations in the Southern California and Central Coast Evolutionarily Significant Unit ("ESU"), and several are facing an extinction vortex due to high levels of inbreeding, low genetic diversity, high human-caused mortality rates from car strikes on roads, depredation kills, rodenticide poisoning, poaching, disease, and increased human-caused wildfires (Benson et al., 2016, 2019; Ernest et al., 2003, 2014; Gustafson et al., 2018; Riley et al., 2014; Vickers et al., 2015).

The effective population sizes of the six populations within the ESU range from 2.3 to 26.9 (Gustafson et al., 2021). An effective population size of 50 is assumed to be sufficient to prevent inbreeding depression over five generations, while an effective population size of 500 is considered sufficient to retain evolutionary potential in perpetuity (Frankham et al., 2014; Traill et al., 2010). All six populations are well below that minimum threshold of 50 and none have an effective population size anywhere near 500, which indicates that these populations are at serious risk of becoming extirpated. Low genetic diversity and high human-caused mortalities are driving local mountain lions in the Central Coast South (CCS, aka Santa Monica Mountains) and Santa Ana Mountains towards an extinction vortex (Benson et al., 2019). Scientists predict that the CCS and SA populations are likely to become extinct within 50 years if gene flow with other mountain lion populations is not improved (Benson et al., 2019; Gustafson et al., 2021). And researchers found that the Central Coast North (CCN) population has genetic diversity estimates

as low as those in the CCS and SA populations (Gustafson et al., 2021). More information regarding the status and threats to mountain lions is available in the Center's petition to the California Fish and Game Commission to protect Southern California and Central Coast mountain lions under the California Endangered Species Act (Yap et al., 2019).

The Project area is located between the CCN and CCS populations. Scientists are concerned that continuing genetic isolation and genetic drift in the CCN and CCS populations could lead to rapid declines and local extinctions. The authors suggest that the CCN population is experiencing genetic drift due to dispersal barriers to the north and limited gene flow to the south and east (Gustafson et al., 2021). The authors state, "if dispersal is limited by continued development southeast of the Central Coast North population, rapid genetic drift and inbreeding may ensue (Mills & Allendorf, 1996; Wang, 2004) and local extinctions may occur as predicted in the Central Coast South and Santa Ana populations (Benson et al., 2016; 2019)" (Gustafson et al., 2021). They "consider the Central Coast Central population to be essential for the long-term viability of both adjacent populations and urge that habitat in this region is not fragmented further" (Gustafson et al., 2021). The EIR fails to disclose this information and therefore fails to comply with CEQA.

Numerous studies highlight the impacts of human activities on mountain lions. Humancaused mortalities—including vehicle strikes, rodenticide poisoning, depredation kills, poaching, and wildfire—are the leading cause of death for mountain lions across California, exceeding natural mortality rates (Benson, Sikich, et al., 2020; Benson et al., 2023; Nisi et al., 2023; Vickers et al., 2015). In addition, human activities also alter these large carnivores' behavior in ways that likely further impede important movement and gene flow. For example, researchers found that mountain lions are so fearful of humans and noise generated by humans that they will abandon the carcass of a deer and forgo the feeding opportunity just to avoid humans (Smith et al., 2017). The authors concluded that even "non-consumptive forms of human disturbance may alter the ecological role of large carnivores by affecting the link between these top predators and their prey" (Smith et al., 2017). In addition, mountain lions have been found to respond fearfully upon hearing human vocalizations, avoiding the area and moving more cautiously when hearing humans (Smith et al., 2017; Suraci et al., 2019).

Other studies have demonstrated other shifts in behavior and movement patterns of pumas in response to human activities, like increased avoidance behavior in areas with more roads and higher development densities and increased nocturnal activity as human presence increases (Bolas et al., 2025; Dougherty et al., 2025; Lucas, 2020; Nickel et al., 2020, 2021; Nisi et al., 2022, 2023; Smith et al., 2015, 2019; Y. Wang et al., 2017; Wilmers et al., 2013, 2021; Yovovich et al., 2020). Pumas have also been found to generally avoid areas with nearby night lighting (Barrientos et al., 2023). Thus, the increased human presence due to the Project's new roads and development could have significant negative impacts on puma survival and behavior,

which could reduce the genetic health of the local population and ultimately diminish the longterm survival of the CCC population as well as the neighboring CCN and CCS populations. CEQA requires a recirculated EIR that adequately analyzes these potential impacts.

Another study further documented the impacts of human activities on mountain lions in the Santa Cruz Mountains, specifically on communication and reproductive behaviors important for their survival (Yovovich et al., 2020). Males use scrapes to delineate territories as well as attract potential mates (Allen et al., 2015, 2016), and the males in the study preferred to use relatively flat areas away from human influence as scrape habitat (Yovovich et al., 2020). Similarly, when nursing females (with kittens less than 8 weeks old) shrank their home ranges to an average of 9 km² while their young were most vulnerable, they also selected undeveloped lands away from human disturbance, opting for habitat with protective cover and sufficient water and prey availability (Yovovich et al., 2020). The loss of adequate undisturbed communication and nursery habitat could disrupt important communication and reproductive behaviors that facilitate social structure and overall survival. The authors predicted that future development within the Santa Cruz Mountains could reduce nursery and communication habitat by 20% and 50%, respectively, while further fragmenting the landscape. Such patterns likely extend to other regions within the proposed Southern California/Central Coast ESU.

The 2025 supplemental EIR's wildlife camera study recorded mountain lions in the Project area 52 times within a span of just six months (see Table 3.3-2 at SDEIR 3.3-13). The images captured include two occurrences of a pair of mountain lions traveling together and an individual marking territory. The pairs could be a mother and cub or a breeding pair. This high level of activity in the Project area suggests that the Project area may be important live-in and move-through habitat for mountain lions, and may be used for communication and reproductive behaviors. The loss of adequate undisturbed communication and nursery habitat, both temporarily and permanently from Project activities and operation/maintenance, could disrupt important mountain lion communication and reproductive behaviors that facilitate social structure and overall survival. Adequate analyses and mitigation regarding the Project's impacts to mountain lions should be provided in a recirculated EIR.

Other studies document nuanced sensitivities of California mountain lions to human presence, activities, and infrastructure while also providing glimpses of how humans and mountain lions can safely coexist. Pumas in the Santa Cruz Mountains were found to less likely occur in areas with higher development densities (*i.e.*, areas with greater road and/or building densities) (Nickel et al., 2020). This aligns with other studies that have demonstrated that mountain lion avoidance behavior increases with greater development densities (Smith et al., 2015, 2019; Y. Wang et al., 2017; Wilmers et al., 2013). In addition, researchers found that in open space areas where recreational activities are allowed (*e.g.*, hiking, biking), mountain lions generally avoided human presence and became more nocturnal as human presence increased

(Nickel et al., 2020). Similar shifts in puma behavior in response to human activities have been documented in other studies (Lucas, 2020; Suraci et al., 2019; Y. Wang et al., 2015, 2017). There is often a cost of these behavioral shifts, such as increased energy expenditure that could potentially reduce fitness. Studies have found that pumas expend more energy by increasing their kill rates in high housing density areas (Smith et al., 2017) and having higher nighttime activity in developed areas (Y. Wang et al., 2017). This is further supported by a study that found mountain lions increased movement efficiency during the Covid-19 shutdown, which suggests that they incur energetic costs by increasing movement and space-use when avoiding human activity (Benson et al., 2021).

There are numerous scientific studies that provide insights on the profound impacts human activities and infrastructure have on mountain lion survival, and they emphasize the need to adequately assess and mitigate impacts to these CESA candidate species in the Project area. These studies add to the accumulating evidence that mountain lions require a habitat mosaic that provides sufficient room to roam away from human-disturbed areas and connected to expansive, intact, heterogeneous habitats (Beier et al., 1995; Dickson et al., 2005; Dickson & Beier, 2002; Kertson et al., 2011; Zeller et al., 2017). Continued construction of roads and development in mountain lion habitat with little regard for their movement and behavioral needs has direct and indirect lethal and sublethal impacts that threaten the persistence of Southern California and Central Coast puma populations.

Mountain lions are a key indicator species of wildlife connectivity and healthy ecosystems. As the last remaining wide-ranging large carnivore in California, the ability to move through large swaths of interconnected habitat is vital for genetic connectivity and their longterm survival. Local extinction of mountain lions in the region could have severe ecological consequences. Many scavengers, including many raptors, foxes, and numerous insects, would lose a reliable food source (Barry et al., 2019; Elbroch et al., 2017; Ruth & Elbroch, 2014). Fish, birds, amphibians, reptiles, rare native plants, and butterflies could potentially diminish if this apex predator were lost (Ripple et al., 2014; Ripple & Beschta, 2006, 2008). Loss of this ecosystem engineer and important predator-prey dynamics could have cascading effects on other plant and animal species, potentially leading to a decrease in biodiversity and diminished overall ecosystem function (Barry et al., 2019; Benson, Mahoney, et al., 2020; Elbroch et al., 2017; Ripple et al., 2014).

ii. The 2025 Supplemental EIR's Mitigation Fails to Reduce the Project's Impacts to Mountain Lions to Less than Significant.

The EIR fails to adequately assess and mitigate impacts to mountain lions to less than significant. Mitigation Measure 3.3-8g states that a biologist will conduct pre-construction surveys for known or potential mountain lion dens and implement avoidance and minimization

measures for any identified mountain lion dens (at EIR 4.0-5). However, this mitigation measure is insufficient and not based on the best available science. Kitten dens are very well hidden in rocky outcrops or dense vegetation. Experts often find them because the mother has a GPS collar, and her behavior (*e.g.*, having a smaller home range, staying in one location frequently) can signal she has had kittens. But mountain lions in the Project area are less monitored than other populations, and it is unlikely there will be many (if any) radio-collared lions in the vicinity. These surveys would likely be ineffective at determining the presence or potential presence of mountain lion dens. Such dens could be easily missed during surveys, which could result in kittens being killed or orphaned if the mother is deterred by nearby human activity and abandons them. Simply conducting mountain lion den surveys is insufficient and inadequate mitigation.

Kitten dens are not the only vulnerable aspect of mountain lion life history. The lack of a known or potential den does not indicate the area is not being used by mountain lions. Mountain lions are nocturnal, elusive creatures that are difficult to find in the wild. They are so stealthy and secretive that lion sightings are rare despite the high numbers of outdoor recreationists in mountain lion habitat. They occur in low densities and have large home ranges. In California, resident adult and total population densities have been found to be 1.1 and 3.6 per 100 km², respectively (Pierce & Bleich, 2003). Riley et al. (2014) found that mountain lions in the Santa Monica Mountains have home ranges of 100-200 km² for females and 300-500 km² for males. If one does not see a mountain lion or evidence of a mountain lion in the area, it could still be there using the site in some way. For example, a wildlife camera study conducted in the Northlake project area found no trace of mountain lions on the site, yet in November 2020 a mountain lion was recorded on a wildlife camera using a culvert adjacent to the site. The temporary impacts of construction and permanent impacts of operation and maintenance could significantly impact the long-term survival of struggling mountain lion populations in the Southern California/Central Coast ESU.

Every lion in the Project area is critical for the long-term survival of healthy mountain lion populations throughout the state. The primary threat to mountain lions in the Southern California/Central Coast ESU is genetic isolation due to lack of connectivity caused by continuous development in mountain lion habitat with little regard of their movement needs. Thus, the persistence of the six populations with the Southern California/Central Coast ESU relies heavily on being connected with mountain lions throughout the ESU. The location of the proposed Project slices through and important connectivity area between the Fort Ord National Monument and the Sierra de Salinas and Santa Lucia Range near a wildlife crossing on the SR 68 that is used the most by wildlife in the area. Effective wildlife connectivity that considers the life history and behaviors of mountain lions in this region is paramount for the survival of the Southern California and Central Coast mountain lions, yet the EIR fails to appropriately assess and mitigate the Project's impacts to mountain lions.

B. The EIR's Lack of Wildfire Risk Analysis Is Inadequate in Light of Increased Fire Risk.

The EIR for the Project is critically deficient regarding wildfire risk and fails to comply with CEQA due to substantial changes in circumstances that have occurred since its preparation. (Pub. Res. Code § 21166; CEQA Guidelines, § 15162(a)(2), (a)(3)(A), (B)), *see also People ex rel. Bonta v. Cty. of Lake*, 105 Cal. App. 5th 1222 (2024)). The original EIR provided only a cursory discussion limited to fire *protection service demand*, neglecting an analysis of wildfire risk, potential impacts from placing development in a hazardous area, and evacuation safety under current conditions. (DEIR at 6-4, 6-5). Since the EIR was prepared, the project area has been upgraded from a moderate to a High Fire Hazard Severity Zone by Cal Fire². These omissions, compounded by dramatically increased wildfire frequency and severity and advances in scientific understanding over the past decade, constitute substantial changes requiring a new, dedicated wildfire risk analysis pursuant to Public Resources Code §21166 and CEQA Guidelines §15162(a)(2).

The 2015 EIR's discussion of fire protection focused solely on whether new fire stations would be needed or if there would be significant impact service ratios and response times, concluding a less-than-significant impact based on communications from 2001. (DEIR at 6-4, 6-5). It mentioned fire department staffing, stations, and training (including wildland fire control) but contained *no analysis* of: the actual wildfire hazard severity in the specific project area (though later sections may designate zones, the *impact analysis* on this hazard is missing); the increased risk of ignitions associated with introducing new development into the wildland urban interface; the potential for the project itself to expose people and structures to significant risk from wildfire; or the adequacy of evacuation routes and procedures under realistic wildfire scenarios, especially considering cumulative traffic and the potential for rapid fire spread. This minimal treatment is undeniably inadequate. Substantial changes in circumstances regarding wildfire have occurred, rendering the original EIR's silence on wildfire risk a critical flaw.

First, the general understanding and reality of wildfire in California have dramatically changed since 2013. Climate change has led to hotter, drier conditions, exacerbating fire behavior (Yap, Rose, Broderick, et al., 2021). State policy now explicitly recognizes that development in the wildland urban interface increases ignition risk. (OPR 2018 Final Statement of Reasons – Update to CEQA Guidelines Checklist]; *see also Clews Land & Livestock, LLC v. City of San Diego* (2017) 19 Cal.App.5th 161, 193 [recognizing potential for significant environment effects when project brings new development to a wildfire prone area].) According

² Cal. Dep't of Forestry & Fire Prot., Off. of the State Fire Marshal, *Fire Hazard Severity Zones*, https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones (last visited April 3, 2025).

to a report from Governor Gavin Newsom's Office, construction of more homes in the wildlandurban interface is one of the main factors that "magnify the wildfire threat and place substantially more people and property at risk than ever before" (Governor Newsom's Strike Force, 2019). Between 2015 and 2020 almost 200 people in the state were killed in wildfires, more than 50,000 structures burned, hundreds of thousands of people had to evacuate their homes and endure power outages, and millions were exposed to unhealthy levels of smoke and air pollution. Research has confirmed that human activities are responsible for the vast majority of ignitions (Balch et al., 2017; Keeley & Syphard, 2019) and that homes themselves can fuel fires, often overwhelming even modern building codes (Knapp et al., 2021). The devastating health impacts of wildfire smoke (CARB, 2021; Reid et al., 2016; Weinhold, 2011) and the immense economic costs (D. Wang et al., 2021) are now widely acknowledged. These significant effects were not assessed anywhere in this EIR.

Second, and critically, substantial changes have occurred *locally* that demonstrate the heightened risk. The 2020 River Fire, ignited by lightning near the project area, burned 48,088 acres, destroyed structures, forced evacuations, and led to subsequent damaging mudslides on the burn scar. The nearby 2020 Carmel Fire burned 6,905 acres and destroyed 50 homes, displacing residents, and highlighting the vulnerability of communities in the region. These events provide evidence that the project area is subject to large, destructive wildfires far exceeding anything contemplated or discussed in the 2013 EIR. This represents a substantial increase in the known severity of the wildfire hazard in the project's specific environment that the EIR ignores. The EIR does not address that ignitions in the area under the current fire regime can be catastrophically dangerous and have devastating environmental consequences, and that the Project will increase the likelihood of those ignitions. Furthermore, it does not address evacuations. In case of a fire in the area, everyone who lives between Laureles Grade and River Road must evacuate via Highway 68. This Project would add more residents and increase the fire risk, without considering how the residents of the new development would evacuate, or how adding additional cars to Highway 68 in the event of an emergency would affect current residents and emergency services.

These constitute new or substantially more severe significant environmental effects that were not adequately addressed in the 2013 EIR. Relying on the outdated and incomplete information from 2013, which predates the lessons of the River and Carmel Fires and the evolution of wildfire science and policy, fails to provide the necessary environmental disclosure and analysis required by CEQA. Therefore, a subsequent or supplemental EIR with a comprehensive Wildfire Risk Assessment section is legally required. This analysis must evaluate the project based on current hazard conditions, incorporate modern scientific understanding of fire behavior and ignition risks, assess evacuation safety under realistic scenarios, analyze potential smoke impacts, consider impacts on vulnerable populations, and identify feasible, up-to-date mitigation measures beyond simple reliance on existing fire department services. Failure

April 11, 2025 Page 13 to conduct this updated analysis would be an abuse of discretion and would ignore the substantially changed, high-risk wildfire environment in which the project is now proposed.

C. The EIR's Traffic Analysis is Legally Inadequate Due to Substantial Changes in Circumstances Requiring a New Study.

The EIR for the proposed project relies on a traffic analysis that is now 12 years old, based on data collected even earlier in 2006. The passage of over a decade, coupled with demonstrable changes in the area, constitutes such substantial changes, directly impacting the validity of the 2015 traffic findings.

The 2015 EIR's traffic chapter details conditions based primarily on traffic counts conducted in 2006. (Recirculated DEIR Table 3.10-3). This data, now 19 years old, formed the basis for analyzing existing conditions and projecting future impacts along key corridors like State Route 68, State Route 218, York Road, Laureles Grade Road, Corral de Tierra Road, and San Benancio Road. The analysis acknowledged significant existing deficiencies in 2006/2013, noting that five of the six study intersections already operated below acceptable Level of Service (LOS) standards during peak hours (e.g., SR 68/Laureles Grade at LOS F PM peak; SR 68/San Benancio Rd at LOS F PM peak). (Recirculated DEIR 3.10-7). Relying on this 12-year-old baseline data to assess the impacts of a *new* project in the *current* environment is fundamentally flawed due to substantial changes in the area. Substantial changes in regional population, employment centers, travel patterns, potential transit adjustments (even if minor), and community desire or need for active transportation infrastructure have likely occurred since 2006/2013. An analysis predicated on the near absence of these modes and minimal transit service 19 years ago is no longer accurate or sufficient.

New significant information confirms that traffic conditions have substantially degraded. A recent August 2023 Traffic Operations analysis Report Addendum by Caltrans District 5 reveals the State Route 68 corridor currently experiences 6,609 Daily Vehicle Hours of Delay (DVHD) and 11,565 Daily Person Hours of Delay (DPHD). (DEIR for Scenic Route 68 Corridor Improvements Project, November 2023.) Peak hour conditions are also severe, with 259 Vehicle Hours of Delay (VHD) in the AM Peak and 747 VHD in the PM Peak Hour. This documented current delay, stemming from intersection inefficiency, lack of signal coordination, queuing, and stop-and-go conditions, represents a quantifiable worsening of the situation compared to the conditions analyzed using 2006 data. Furthermore, safety issues directly linked to this congestion are evident: vehicle collision rates between 2017 and 2019 on a key segment of SR 68 exceeded the statewide average, with rear-end collisions, typical of congestion, being the predominant type. This recent data from Caltrans provides a drastically different and more severe picture of the existing baseline conditions than what was analyzed in the 2015 EIR.

April 11, 2025 Page 14 Therefore, the traffic section of the 2015 EIR is outdated and fails to provide an accurate assessment of existing conditions and potential project impacts as required by CEQA. The substantial changes in the intervening 12 years necessitate a completely new traffic study, utilizing current data and methodologies, to ensure that decision-makers and the public are fully informed about the project's potential significant traffic impacts and that appropriate, currently relevant mitigation measures are identified.

D. The EIR's Groundwater Resources Analysis is Legally Inadequate Due to Substantial Changes in Circumstances Requiring a New Study.

The EIR relies on an assessment of groundwater resources and hydrogeology that is fundamentally outdated, primarily based on technical reports from 2002 and 2003. (FEIR 3.6-1). Reliance on this data fails to comply with CEQA because substantial changes in circumstances related to water availability, drought conditions, and groundwater management have occurred since the EIR's preparation. These changes render the original analysis inaccurate and incapable of adequately assessing the project's current potential impacts on water resources. The intervening decade-plus, marked by unprecedented drought and evolving understanding of groundwater basins, constitutes such substantial changes, directly undermining the validity of the 2015 findings regarding water supply and impacts.

The 2015 EIR's conclusions about water impacts rested heavily on a Hydrogeologic Report prepared in 2002 and updated in 2003 (EIR Appendix F). This analysis, now over 20 years old, formed the basis for determining:

- The project's estimated water demand (12.75 AFY). (FEIR 3.6-21).
- The adequacy of supply from two wells (Oaks Well, New Well) located in the San Benancio Gulch subarea of the El Toro Groundwater Basin. (FEIR 3.6-11).
- The conclusion that drawdown impacts on neighboring wells would be negligible (<2 feet at 1,000 feet over 20 years) based on pump tests conducted in 2002/2003. (FEIR 3.6-32).
- The assessment that cumulative impacts from loss of return flow (5.88 AFY) were less than significant due to an assumed overall basin surplus calculated using pre-2008 data. (FEIR 3.6-21).
- Water quality issues (arsenic, TDS, etc.) were identified as potentially significant but mitigatable through treatment. (FEIR 3.6-15).

Relying on these decades-old assumptions and calculations in the current hydrological context is inappropriate and legally insufficient due to substantial changes in circumstances.

First, evidence of increased stress on local groundwater resources constitutes a substantial change. The recent initiative by the Salinas Valley Basin Groundwater Sustainability Agency

(SVBGSA) to track dry domestic wells highlights this concern. The SVBGSA explicitly notes the impact of a "decade of historic drought" and states that shallow residential wells "typically go dry before wells that serve agriculture or municipal users."³ Further, ongoing County monitoring showing seasonal groundwater level declines, while expected, takes on greater significance in the context of long-term drought, suggesting reduced resilience and potentially lower baseline levels than assumed two decades ago. The Salinas Valley Basin is also at risk of seawater intrusion, which was not considered in the 2013 EIR. (Montgomery, 2024).

Second, the regulatory landscape has shifted significantly with the passage of the Sustainable Groundwater Management Act (SGMA) in 2014, post-dating the preparation of the EIR. SGMA mandates the formation of Groundwater Sustainability Agencies (like SVBGSA) and the development of Groundwater Sustainability Plans to achieve long-term basin sustainability, prevent undesirable results (like chronic lowering of groundwater levels, reduction of storage, seawater intrusion, land subsidence, surface water depletion, and water quality degradation), and manage basins within their sustainable yield. This represents a substantial change in how groundwater resources are managed and evaluated, introducing new standards and considerations (like sustainable yield) not contemplated in the 2002/2003 analysis. The project's impacts must be evaluated against these current regulatory requirements and sustainability goals.

Therefore, the groundwater resources section of the 2015 EIR is outdated and fails to provide an accurate assessment of existing conditions and potential project impacts as required by CEQA. The substantial changes in climate, observed water stress, and regulatory frameworks over the past 12 years require a new water supply assessment and hydrogeologic analysis. This updated study must utilize current data, reflect observed drought impacts, incorporate SGMA requirements and sustainable yield considerations, and re-evaluate impacts on basin levels, nearby wells, and cumulative conditions. Relying on the 2002-2013 analysis would obscure potentially significant impacts and constitute an abuse of discretion.

III. THE PROJECT DOES NOT COMPLY WITH THE GENERAL PLAN'S GOALS TO REDUCE SPRAWL

Monterey County's General Plan states that the "the County shall discourage premature and scattered development" (Policy 26.1.2, DEIR 3.8-1) and that "residential development should be concentrated in growth areas" (Policy 27.1.3, DEIR 3.8-6). The EIR claims that

³ David Schmalz, Salinas Valley Basin Groundwater Basin Sustainability Agency Announces New Statewide Tool to Report Dry Residential Wells, MONTEREY CNTY. NOW (Mar. 3, 2023), https://www.montereycountynow.com/blogs/news_blog/salinas-valley-basingroundwater-basin-sustainability-agency-announces-new-statewide-tool-to-report-dryresidential/article_efe54f24-ba08-11ed-a1f5-3f2d73449ffe.html.

because "the project site is designated "Rural Residential Density" and "Low Density Residential"" it is consistent with the General Plan. However, it also acknowledges that the project is located adjacent to "recreational land" (Toro Regional Park) to the east and south, unimproved lands/watershed area and grazing/rangelands to the north and vacant land to the northwest. The only existing single-family residences near the project site is located southwest of the project site.

Suburban and exurban sprawl is generally characterized by low-density development that rigorously separates residential uses from other land uses and relies entirely or almost entirely on automobiles to connect the land uses (Rubiera-Morollón & Garrido-Yserte, 2020). The project clearly fits this description and is thus in conflict with the County's General Plan.

Sprawl development destroys native habitat, threatening many species' survival and greatly reduces nature's ability to store carbon (Benítez-López et al., 2010b). Additionally, sprawl development pulls people away from existing public resources, including schools, transportation and parks. This creates a cycle of divestment in existing communities to compensate for the investment in new roads, sewers and other infrastructure (Litman, 2015). People then endure long commutes and poor air quality as a result of more vehicles on the road (Mujtaba & Shahzad, 2021).

The County should divest from such poor planning practices and instead focus on development of infill areas that already have critical community infrastructure.

IV. THE PROJECT DOES NOT PROVIDE AFFORDABLE HOUSING

California is experiencing an affordable housing crisis (Kimberlin, 2019). It is critical that the County invest in building units that are permanently designated as affordable. While this project does pay the legally mandated "in-lieu fee equal to \$409,555.50 (\$160,610/inclusionary unit)" (DEIR, 3.8-11) satisfying the Monterey County Inclusionary Housing Ordinance, it does nothing to directly address this crisis.

In-lieu fees, or fees that a developer pays into a fund to be spent on affordable housing elsewhere, should be eliminated, ensuring that all new developments with affordable housing requirements will be built onsite. In-lieu fees allow developers to pay their way out of affordable housing requirements leading to highly segregated neighborhoods and displacement of low-income residents to off-site affordable units. To ensure that low-income residents are provided affordable options in neighborhoods with the high public investment, we need to eliminate this option for developers.

Affordable housing is only equitable if low-income residents are provided housing opportunities with access to public resources. Changing existing single-family zoning in infill areas to denser zoning that includes duplexes or multifamily units would encourage higher density in existing communities.

Shifting to more compact housing types significantly reduces residential land consumption. A mix of 80% single-family, 10% attached and 10% multifamily housing requires about twice as much land as an equal mix of housing types, and more than three times as much land as 10% single-family, 40% attached and 50% multifamily housing. It's important to note that many existing single-family lots are very large (e.g., 8,000+ square feet) and could accommodate duplexes or be split into two separate smaller lots large enough for single-family houses and separate yards.

However, upzoning alone is not enough. We need to increase equitable affordable housing in communities that have remained exclusionary. This could be achieved by enacting a inclusionary housing ordinances of 15% at 50% of average median income or 20% at 60% of average median income for all new development of five units or more. The County should do more to ensure that all new development directly addresses the affordability crisis by incorporating such units into their project designs.

V. THE EIR'S TRANSPORTATION SECTION FAILS TO SUFFICIENTLY MITIGATE SIGNIFICANT IMPACTS.

The EIR concludes that there will be significant and unavoidable transportation impacts associated with the project, however the EIR does not adequately exhaust all mitigation measures that could reduce said impacts, especially those associated with increasing the County's vehicle miles travelled (VMTs). (DEIR, 3.10-26).

Increasing a region's VMTs isn't just bad planning, it also undermines community health. Increased VMT increases emissions of air pollutants such as nitrogen oxides (NO_x), volatile organic compounds (VOCs), carbon monoxide, heavy metals, carbon dioxide and respirable particulate matter (PM_{2.5}). Increased VMT also leads to more ozone (O₃) production through the photochemical reactions of NO_x and VOCs emitted by vehicles (Lurmann et al., 2015). Short-and long-term exposure to several of these pollutants has been linked to premature mortality, compromised birth outcomes, heart disease and a host of respiratory illnesses (Mujtaba & Shahzad, 2021).

Another serious direct impact of increasing the number of cars on roads is automobile crashes, which are the leading cause of death among young people (15 to 19 years old) in the

United States.⁴ An estimated 42,915 people in the U.S. died in car crashes in 2021 alone and 3.4 million people are injured each year, which costs an estimated \$473.2 billion annually as measured by wage and productivity losses, medical expenses, motor-vehicle damage, and employers' uninsured costs (Frumkin et al., 2004; U.S. Department of Transportation, 2022).⁵

Beyond the direct impacts, increased VMT has long term impacts on commuters. In 2019, the duration of the average daily commute in the United States increased to a new high of 55.2 minutes, and a record 9.8 percent of commuters reported daily commutes of at least 2 hours (Burd et al., 2021). These long commutes reduce time available to spend with family, friends, and community, and reduce opportunities for healthy recreation. The increase in inactivity and isolation can also lead to long-term health complications such as pre-diabetes, diabetes, obesity, asthma, isolation, stress and depression (Ewing et al., 2003; Leyden, 2003).

CEQA requires that mitigation must include concrete, specific, and enforceable actions. (*California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173 [City's urban decay mitigation measures were inadequate under CEQA to address the impact from the development of a 234-acre regional shopping center on undeveloped agricultural land because the measures did not ensure the city would take concrete, measurable actions].) The County may not defer mitigation measures to a later date unless the EIR provides specific reasons why they cannot be developed now and provides specific performance measures to evaluate their success. (*Preserve Wild Santee v. City of Santee* (2012) 210 CA 4th 260, 281 [mitigation measures that are so undefined that their effectiveness is impossible to determine are legally inadequate].) Unfortunately, the EIR's proposed mitigation fails to meet these standards.

The EIR simply relies on their intended contribution to "State Route 68 Commuter Improvements" through payment of the TAMC Regional Development Impact Fee (RDIF) (DEIR, 3.10-30). But, there are many other mitigation measures that can and should be incorporated. Specifically, investment in public transit should be a priority of the project. The EIR acknowledges that "MST has reduced Line 21 service in recent years due to a lack of ridership on the route" (DEIR, 3.10-12).

But, providing alternatives to single occupancy vehicle travel is essential to building an efficient, sustainable and equitable transportation system. Unfortunately, we have a long way to go if we are going to achieve this vision in the U.S. In 2013, it was reported that of all the U.S. daily commutes to work, 76.4% are of people driving alone (McKenzie, 2015). According to the Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2015, our collective daily

⁴ Center for Disease Control and Prevention. "Underlying Cause of Death, 2018-2021." <u>https://wonder.cdc.gov</u>

⁵ NSC Injury Facts. "Costs of Motor-Vehicle Injuries." 2021. <u>https://injuryfacts.nsc.org/all-injuries/costs/guide-to-calculating-costs/data-details/</u>

transportation in the U.S. constitutes about 27% of the total greenhouse gasses released (U.S. Environmental Protection Agency, 2017) California's annual average emissions associated with passenger vehicles between 2000 and 2020 was approximately 110 million metric tons of CO2e.

To change these trends, government agencies need to invest in alternative modes of transportation to not only make them cheaper to use, but more efficient than driving. **Best practices for transportation options should include providing free public transit services for future residents and workers; implementing bus only lanes; optimizing bus routes to minimize overlap and ensuring coverage across the county in line with demand; and providing high-frequency, reliable services with regular bus stops for easy access.**

Studies indicate that free public transit services typically result in ridership increase from 20% to 60% in a matter of just a few months (Studenmund and Connor, 1982). Similarly, bus lanes that reduce total transit door-to-door travel times by 5%-15% will increase urban peak ridership 2%-9% (UCLA Institute of Transportation Studies, 2019). Lastly, ensuring accessibility and convenience is essential to increasing ridership. Providing more bus stops decreases the distance residents have to travel to access such services.

It should be a priority of all governments to reduce VMTs with every new project, but instead this proposed sprawl development would steer the region in the opposite direction, eroding community and environmental health to build more single-occupancy vehicle infrastructure. Additionally, the EIR fails to adopt feasible, effective mitigation measures to reduce the Project's transportation impacts. It is the "policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures which will avoid or substantially lessen the significant environmental effects of such projects." (Pub. Res. Code § 21002.) Adoption of feasible mitigation measures would lower the Project's overall transportation impacts and its associated contribution to climate change, bad air quality and overall decreases community health.

VI. CONCLUSION

Thank you for the opportunity to submit comments on the Final Environmental Impact Report ("FEIR") for the Harper Canyon (Encina Hills) Subdivision Project Final Supplemental Environmental Impact Report SCH# 2003071157. We urge the County to recirculate a legally compliant EIR that fully addresses wildlife connectivity and analyzes other impacts—especially water, wildfire, and transportation—in light of substantial new information.

Given the possibility that the Center will be required to pursue legal remedies in order to ensure that the County complies with its legal obligations including those arising under CEQA, we would like to remind the County of its statutory duty to maintain and preserve all documents

April 11, 2025 Page 20 and communications that may constitute part of the "administrative record" of this proceeding. (§ 21167.6(e); *Golden Door Properties, LLC v. Superior Court* (July 30, 2020, Nos. D076605, D076924, D076993) ___Cal.App.5th___ [2020 Cal. App. LEXIS 710.) The administrative record encompasses any and all documents and communications that relate to any and all actions taken by the County with respect to the Project, and includes "pretty much everything that ever came near a proposed [project] or [] the agency's compliance with CEQA" (*County of Orange v. Superior Court* (2003) 113 Cal.App.4th 1, 8.) The administrative record further includes all correspondence, emails, and text messages sent to or received by the County's representatives or employees, that relate to the Project, including any correspondence, emails, and text messages or employees and the Applicant's representatives or employees. Maintenance and preservation of the administrative record requires that, *inter alia*, the County (1) suspend all data destruction policies; and (2) preserve all relevant hardware unless an exact replica of each file is made.

Please add the Center to your notice list for all future updates to the Project and do not hesitate to contact the Center with any questions at the number or email listed below.

Sincerely,

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References

- Aguilar, R., Quesada, M., Ashworth, L., Herrerias-Diego, Y., & Lobo, J. (2008). Genetic consequences of habitat fragmentation in plant populations: Susceptible signals in plant traits and methodological approaches. *Molecular Ecology*, 17, 5177–5188.
- Allen, M. L., Wittmer, H. U., Houghtaling, P., Smith, J., Elbroch, L. M., & Wilmers, C. C.
 (2015). The role of scent marking in mate selection by female pumas (Puma concolor). *PLoS ONE*, *10*(10), e0139087.
- Allen, M. L., Yovovich, V., & Wilmers, C. C. (2016). Evaluating the responses of a territorial solitary carnivore to potential mates and competitors. *Scientific Reports*, *6*.
- Balch, J. K., Bradley, B. A., Abatzoglou, J. T., Nagy, R. C., Fusco, E. J., & Mahood, A. L.
 (2017). Human-started wildfires expand the fire niche across the United States. *Proceedings of the National Academy of Sciences*, *114*(11), 2946–2951.
- Barrientos, R., Vickers, W., Longcore, T., Abelson, E. S., Dellinger, J., Waetjen, D. P., Fandos, G., & Shilling, F. M. (2023). Nearby night lighting, rather than sky glow, is associated with habitat selection by a top predator in human-dominated landscapes. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *378*(1892), 20220370.
- Barry, J. M., Elbroch, L. M., Aiello-lammens, M. E., Sarno, R. J., Seelye, L., Kusler, A., &
 Quigley, H. B. (2019). Pumas as ecosystem engineers: Ungulate carcasses support beetle assemblages in the Greater Yellowstone Ecosystem. *Oecologia*, 189, 577–586.
- Beier, P., Choate, D., & Barrett, R. H. (1995). Movement patterns of mountain lions during different behaviors. *Journal of Mammalogy*, 76(4), 1056–1070.
- Benítez-López, A., Alkemade, R., & Verweij, P. A. (2010a). The impacts of roads and other infrastructure on mammal and bird populations: A meta-analysis. *Biological Conservation*, 143, 1307–1316.

- Benítez-López, A., Alkemade, R., & Verweij, P. A. (2010b). The impacts of roads and other infrastructure on mammal and bird populations: A meta-analysis. *Biological Conservation*, 143, 1307–1316.
- Benson, J. F., Abernathy, H. N., Sikich, J. A., & Riley, S. P. D. (2021). Mountain lions reduce movement, increase efficiency during the Covid-19 shutdown. *Ecological Solutions and Evidence*, 2(3), 1–14.
- Benson, J. F., Dougherty, K. D., Beier, P., Boyce, W. M., Cristescu, B., Gammons, D. J.,
 Garcelon, D. K., Higley, J. M., Martins, Q. E., Nisi, A. C., Riley, S. P. D., Sikich, J. A.,
 Stephenson, T. R., Vickers, T. W., Wengert, G. M., Wilmers, C. C., Wittmer, H. U., &
 Dellinger, J. A. (2023). The ecology of human-caused mortality for a protected large
 carnivore. *Proceedings of the National Academy of Sciences*, *120*(13), e2220030120.
- Benson, J. F., Mahoney, P. J., Sikich, J. A., Serieys, L. E. K., Pollinger, J. P., Ernest, H. B., &
 Riley, S. P. D. (2016). Interactions between demography, genetics, and landscape
 connectivity increase extinction probability for a small population of large carnivores in a
 major metropolitan area. *Proceedings of the Royal Society B: Biological Sciences*,
 283(1837), 20160957. https://doi.org/10.1098/rspb.2016.0957
- Benson, J. F., Mahoney, P. J., Vickers, T. W., Sikich, J. A., Beier, P., Riley, S. P. D., Ernest, H.
 B., & Boyce, W. M. (2019). Extinction vortex dynamics of top predators isolated by urbanization. *Ecological Applications*, 0(0), e01868. https://doi.org/10.1002/eap.1868
- Benson, J. F., Mahoney, P. J., Vickers, T. W., Sikich, J. A., Beier, P., Riley, S. P. D., Ernest, H.
 B., & Boyce, W. M. (2020). Conserving ecological roles of top predators in isolated mountains. *Ecological Applications*, *30*(1), e02029.

- Benson, J. F., Sikich, J. A., & Riley, S. P. D. (2020). Survival and competing mortality risks of mountain lions in a major metropolitan area. *Biological Conservation*, 241, 108294– 108294.
- Bolas, E. C., Pingatore, A. D., Mathur, M., Blumstein, D. T., Sikich, J. A., Smith, J. A., Benson, J. F., Riley, S. P. D., & Blakey, R. V. (2025). Human recreation influences activity of a large carnivore in an urban landscape. *Biological Conservation*, *301*, 110812.
- Brehme, C. S., Hathaway, S. A., & Fisher, R. N. (2018). An objective road risk assessment method for multiple species: Ranking 166 reptiles and amphibians in California. *Landscape Ecology*, 33, 911–935.
- Brehme, C. S., Tracey, J. A., Clenaghan, L. R. M. C., & Fisher, R. N. (2013). Permeability of roads to movement of scrubland lizards and small mammals. *Conservation Biology*, 27(4), 710–720.
- Burd, C., Burrows, M., & McKenzie, B. (2021). *Travel Time to Work in the United States: 2019* (American Community Survey Reports). U.S. Department of Commerce, U.S. Census Bureau.
- CARB. (2021). Camp Fire Air Quality Data Analysis.
- Ceia-Hasse, A., Navarro, L. M., Borda-de-Água, L., & Pereira, H. M. (2018). Population persistence in landscapes fragmented by roads: Disentangling isolation, mortality, and the effect of dispersal. *Ecological Modelling*, 375, 45–53.
- Crooks, K. R. (2002). Relative sensitivities of mammalian carnivores to habitat fragmentation. *Conservation Biology*, *16*(2), 488–502.
- Cushman, S. A. (2006). Effects of habitat loss and fragmentation on amphibians: A review and prospectus. *Biological Conservation*, *128*, 231–240.

Cushman, S. A., McRae, B., Adriaensen, F., Beier, P., Shirley, M., & Zeller, K. (2013).
Biological corridors and connectivity. In D. W. Macdonald & K. J. Willis (Eds.), *Key Topics in Conservation Biology 2* (First Edit, pp. 384–403). John Wiley & Sons, Ltd.

- Damschen, E. I., Brudvig, L. A., Burt, M. A., Jr, R. J. F., Haddad, N. M., Levey, D. J., Orrock, J.
 L., Resasco, J., & Tewksbury, J. J. (2019). Ongoing accumulation of plant diversity
 through habitat connectivity in an 18-year experiment. *Science*, *365*(6460), 1478–1480.
- Delaney, K. S., Busteed, G., Fisher, R. N., & Riley, S. P. D. (2021). Reptile and Amphibian
 Diversity and Abundance in an Urban Landscape: Impacts of Fragmentation and the
 Conservation Value of Small Patches. *Ichthyology and Herpetology*, *109*(2), 424–435.
- Delaney, K. S., Riley, S. P. D., & Fisher, R. N. (2010). A rapid, strong, and convergent genetic response to urban habitat fragmentation in four divergent and widespread vertebrates. *PLoS ONE*, 5(9), e12767.
- Diamond, T., McFarland, C., & Thorne, J. H. (2010). The Central Coast Connectivity Project Northern Monterey County Linkages: Report on the Mount Toro to Fort Ord Reserve Study 2008-2009. Big Sur Land Trust.
- Dickson, B. G., & Beier, P. (2002). Home-range and habitat selection by adult cougars in Southern California. *The Journal of Wildlife Management*, 66(4), 1235–1245.
- Dickson, B. G., Jennes, J. S., & Beier, P. (2005). Influence of Vegetation, Topography, and Roads on Cougar Movement in Southern California. *Journal of Wildlife Management*, 69(1), 264–276.
- Dougherty, K. D., Dellinger, J. A., Cristescu, B., Gammons, D. J., Garcelon, D. K., Higley, J.
 M., Martins, Q. E., Riley, S. P. D., Sikich, J. A., Stephenson, T. R., Vickers, T. W.,
 Wengert, G. M., Wilmers, C. C., Wittmer, H. U., & Benson, J. F. (2025). A Functional

Response in Resource Selection Links Multiscale Responses of a Large Carnivore to Human Mortality Risk. *Ecology Letters*, 28(1), e70035.

- Elbroch, L. M., O'Malley, C., Peziol, M., & Quigley, H. B. (2017). Vertebrate diversity benefiting from carrion provided by pumas and other subordinate, apex felids. *Biological Conservation*, 215, 123–131.
- Ernest, H. B., Boyce, W. M., Bleich, V. C., May, B., Stiver, S. J., & Torres, S. G. (2003). Genetic structure of mountain lion (Puma concolor) populations in California. *Conservation Genetics*, 4, 353–366.
- Ernest, H. B., Vickers, T. W., Morrison, S. A., Buchalski, M. R., & Boyce, W. M. (2014). Fractured genetic connectivity threatens a Southern California puma (Puma concolor) population. *PLoS ONE*, 9(10). https://doi.org/10.1371/journal.pone.0107985
- Ewing, R., Schmid, T., Killingsworth, R., Zlot, A., & Raudenbush, S. (2003). Relationship between urban sprawl and physical activity, obesity, and morbidity. *American Journal of Health Promotion*, 18(1), 47–57.

http://74.207.241.65/sites/default/files/AJHP_8_Ewing_0.pdf

- Fellers, G. M., & Kleeman, P. M. (2007). California Red-Legged Frog (Rana draytonii)
 Movement and Habitat Use: Implications for Conservation. *Journal of Herpetology*, 41(2), 276–286.
- Frankham, R., Bradshaw, C. J. A., & Brook, B. W. (2014). Genetics in conservation management: Revised recommendations for the 50/500 rules, Red List criteria and population viability analyses. *Biological Conservation*, 170, 56–63.
- Frumkin, H., Frank, L., & Jackson, R. J. (2004). Urban sprawl and public health: Designing, planning, and building for healthy communities (First Edition). Island Press.

- Goverde, M., Schweizer, K., Baur, B., & Erhardt, A. (2002). Small-scale habitat fragmentation effects on pollinator behaviour: Experimental evidence from the bumblebee Bombus veteranus on calcareous grasslands. *Biological Conservation*, *104*, 293–299.
- Governor Newsom's Strike Force. (2019). Wildfires and Climate Change: California's Energy Future.
- Gustafson, K. D., Gagne, R. B., Buchalski, M. R., Vickers, T. W., Riley, S. P. D., Sikich, J. A., Rudd, J. L., Dellinger, J. A., LaCava, M. E. F., & Ernest, H. B. (2021). Multi-population puma connectivity could restore genomic diversity to at-risk coastal populations in California. *Evolutionary Applications*.
- Gustafson, K. D., Gagne, R. B., Vickers, T. W., Riley, S. P. D., Wilmers, C. C., Bleich, V. C.,
 Pierce, B. M., Kenyon, M., Drazenovich, T. L., Sikich, J. A., Boyce, W. M., & Ernest, H.
 B. (2018). Genetic source–sink dynamics among naturally structured and
 anthropogenically fragmented puma populations. *Conservation Genetics*, 20(2), 215–227.
- Haddad, N. M., Brudvig, L. A., Clobert, J., Davies, K. F., Gonzalez, A., Holt, R. D., Lovejoy, T. E., Sexton, J. O., Austin, M. P., Collins, C. D., Cook, W. M., Damschen, E. I., Ewers, R. M., Foster, B. L., Jenkins, C. N., King, A. J., Laurance, W. F., Levey, D. J., Margules, C. R., ... Townshend, J. R. (2015). Habitat fragmentation and its lasting impact on Earth's ecosystems. *Science Advances*, *1*(e1500052), 1–9.
- Heller, N. E., & Zavaleta, E. S. (2009). Biodiversity management in the face of climate change:A review of 22 years of recommendations. *Biological Conservation*, 142, 14–32.
- Hilty, J. A., Worboys, G., Keeley, A., Woodley, S., Lausche, B., Locke, H., Carr, M., Pulsford,I., Pittock, J., White, W., Theobald, D., Levine, J., Reuling, M., Watson, J., Ament, R., &

Tabor, G. (2020). *Guidelines for conserving connectivity through ecological networks and corridors*. International Union for Conservation of Nature.

- HT Harvey & Associates. (2021). *Alma Bridge Road-Related Newt Mortality Study*. Midpensinula Regional Open Space District, Peninsula Open Space Trust.
- Kantola, T., Tracy, J. L., Baum, K. A., Quinn, M. A., & Coulson, R. N. (2019). Spatial risk assessment of eastern monarch butterfly road mortality during autumn migration within the southern corridor. *Biological Conservation*, 231, 150–160.
- Keeley, J. E., & Syphard, A. D. (2019). Twenty-first century California, USA, wildfires: Fueldominated vs. Wind-dominated fires. *Fire Ecology*, 15(24).
- Kertson, B. N., Spencer, R. D., Marzluff, J. M., Hepinstall-Cymerman, J., & Grue, C. E. (2011).
 Cougar space use and movements in the wildland—Urban landscape of western
 Washington. *Ecological Applications*, 21(8), 2866–2881.
- Kimberlin, S. (2019). *California's Housing Affordability Crisis Hits Renters and Households With the Lowest Incomes the Hardest.*
- Knapp, E. E., Valachovic, Y. S., Quarles, S. L., & Johnson, N. G. (2021). Housing arrangement and vegetation factors associated with single-family home survival in the 2018 Camp Fire, California. *Fire Ecology*, 17.
- Kociolek, A. V., Clevenger, A. P., St. Clair, C. C., & Proppe, D. S. (2011). Effects of Road Networks on Bird Populations. *Conservation Biology*, 25(2), 241–249.
- Krosby, M., Theobald, D. M., Norheim, R., & Mcrae, B. H. (2018). Identifying riparian climate corridors to inform climate adaptation planning. *PLoS ONE*, *13*(11), e0205156.

- Lee, J. S., Ruell, E. W., Boydston, E. E., Lyren, L. M., Alonso, R. S., Troyer, J. L., Crooks, K.
 R., & Vandewoude, S. (2012). Gene flow and pathogen transmission among bobcats (Lynx rufus) in a fragmented urban landscape. *Molecular Ecology*, 21(7), 1617–1631.
- Leyden, K. M. (2003). Social Capital and the Built Environment—The Importance of Walkable Neighborhoods. *American Journal of Public Health*, *93*(9), 1546–1551.
- Litman, T. (2015). Analysis of Public Policies That Unintentionally Encourage and Subsidize Urban Sprawl. The New Climate Economy Working Papers.
- Loss, S. R., Will, T., & Marra, P. P. (2014). Estimation of bird-vehicle collision mortality on U.S. roads. *Journal of Wildlife Management*, 78, 763–771.
- Lucas, E. (2020). Recreation-related disturbance to wildlife in California-better planning for and management of recreation are vital to conserve wildlife in protected areas where recreation occurs. *California Fish and Wildlife, Recreation Special Issue*, 29–51.
- Lurmann, F., Avol, E., & Gilliland, F. (2015). Emissions reduction policies and recent trends in Southern California's ambient air quality. *Journal of the Air & Waste Management Association*, 65(3), 324–335. https://doi.org/10.1080/10962247.2014.991856
- Marsh, D. M., & Jaeger, J. A. G. (2015). Direct effects of roads on small animal populations. In Roads and ecological infrastructure: Concepts and applications for small animals (pp. 42–56).
- McClure, C. J. W., Ware, H. E., Carlisle, J., Kaltenecker, G., & Barber, J. R. (2013). An experimental investigation into the effects of traffic noise on distributions of birds:
 Avoiding the phantom road. *Proceedings of the Royal Society B: Biological Sciences*, 280.

- McKenzie, B. (2015). Who Drives to Work? Commuting by Automobile in the United States:
 2013 (American Community Survey Reports). U.S. Department of Commerce, U.S. Census Bureau.
- Mitsch, W. J., & Wilson, R. F. (1996). Improving the success of wetland creation and restoration with know-how, time, and self-design. *Ecological Applications*, 6(1), 16–17.

Montgomery and Associates, (2024). Deep Aquifers Study.

- Mujtaba, G., & Shahzad, S. J. H. (2021). Air pollutants, economic growth and public health:
 Implications for sustainable development in OECD countries. *Environmental Science and Pollution Research*, 28(10), 12686–12698. https://doi.org/10.1007/s11356-020-11212-1
- Nickel, B. A., Suraci, J. P., Allen, M. L., & Wilmers, C. C. (2020). Human presence and human footprint have non-equivalent effects on wildlife spatiotemporal habitat use. *Biological Conservation*, 241, 108383.
- Nickel, B. A., Suraci, J. P., Nisi, A. C., & Wilmers, C. C. (2021). Energetics and fear of humans constrain the spatial ecology of pumas. *Proceedings of the National Academy of Sciences* of the United States of America, 118(5), 1–8.
- Nisi, A. C., Benson, J. F., King, R., & Wilmers, C. C. (2023). Habitat fragmentation reduces survival and drives source–sink dynamics for a large carnivore. *Ecological Applications*, 33(4), e2822. https://esajournals.onlinelibrary.wiley.com/doi/10.1002/eap.2822
- Nisi, A. C., Benson, J. F., & Wilmers, C. C. (2022). Puma responses to unreliable human cues suggest an ecological trap in a fragmented landscape. *Oikos*, 2022(5), e09051. https://onlinelibrary.wiley.com/doi/10.1111/oik.09051

- Orloff, S. G. (2011). Movement patterns and migration distances in an upland population of California Tiger Salamander (Ambystoma californiense). *Herpetological Conservation and Biology*, 6(2), 266–276.
- Pathways for Wildlife. (2017). *Monterey-Salinas SR 68 Plan—Wildlife Connectivity Analysis*. Transportation Agency for Monterey County.
- Pierce, B. M., & Bleich, V. C. (2003). Mountain Lion Puma concolor. In G. A. Feldhamer, B. C. Thompson, & J. A. Chapman (Eds.), *Wild Mammals of North America Biology, Management, and Economics* (2nd ed., pp. 744–757). The Johns Hopkins University Press.
- Reid, C. E., Brauer, M., Johnston, F. H., Jerrett, M., Balmes, J. R., & Elliott, C. T. (2016). Critical review of health impacts of wildfire smoke. *Environmental Health Perspectives*, 124(9), 1334–1343. https://ehp.niehs.nih.gov/wpcontent/uploads/124/9/ehp.1409277.alt.pdf
- Riley, S. P. D., Pollinger, J. P., Sauvajot, R. M., York, E. C., Bromley, C., Fuller, T. K., &
 Wayne, R. K. (2006). A southern California freeway is a physical and social barrier to gene flow in carnivores. *Molecular Ecology*, 15, 1733–1741.
- Riley, S. P. D., Serieys, L. E. K., Pollinger, J. P., Sikich, J. A., Dalbeck, L., Wayne, R. K., & Ernest, H. B. (2014). Individual behaviors dominate the dynamics of an urban mountain lion population isolated by roads. *Current Biology*, 24(17), 1989–1994. https://doi.org/10.1016/j.cub.2014.07.029
- Ripple, W. J., & Beschta, R. L. (2006). Linking a cougar decline , trophic cascade , and catastrophic regime shift in Zion National Park. *Biological Conservation*, 133, 397–408. https://doi.org/10.1016/j.biocon.2006.07.002

- Ripple, W. J., & Beschta, R. L. (2008). Trophic cascades involving cougar, mule deer, and black oaks in Yosemite National Park. *Biological Conservation*, 141, 1249–1256. https://doi.org/10.1016/j.biocon.2008.02.028
- Ripple, W. J., Estes, J. A., Beschta, R. L., Wilmers, C. C., Ritchie, E. G., Hebblewhite, M.,
 Berger, J., Elmhagen, B., Letnic, M., Nelson, M. P., Schmitz, O. J., Smith, D. W.,
 Wallach, A. D., & Wirsing, A. J. (2014). Status and ecological effects of the world 's
 largest carnivores. *Science*, *343*(6167), 1241484. https://doi.org/10.1126/science.1241484
- Rubiera-Morollón, F., & Garrido-Yserte, R. (2020). Recent Literature about Urban Sprawl: A
 Renewed Relevance of the Phenomenon from the Perspective of Environmental
 Sustainability. *Sustainability*, *12*(16), 6551. https://doi.org/10.3390/su12166551
- Ruth, T. K., & Elbroch, L. M. (2014). The carcass chronicles: Carnivory, nutrient flow, and biodiversity. *Wild Felid Monitor*, 14–19.
- Semlitsch, R. D., & Bodie, J. R. (2003). Biological criteria for buffer zones around wetlands and riparian habitats for amphibians and reptiles. *Conservation Biology*, *17*(5), 1219–1228.
- Slabbekoorn, H., & Ripmeester, E. A. P. (2008). Birdsong and anthropogenic noise: Implications and applications for conservation. *Molecular Ecology*, *17*, 72–83.
- Sloan, L. M. (2012). Population structure, life history, and terrestrial movements of western pond turtles (Actinemys marmorata) in lentic habitats along the Trinity River, California (Issue May).
- Smith, J. A., Duane, T. P., & Wilmers, C. C. (2019). Moving through the matrix: Promoting permeability for large carnivores in a human-dominated landscape. *Landscape and Urban Planning*, 183, 50–58.

- Smith, J. A., Suraci, J. P., Clinchy, M., Crawford, A., Roberts, D., Zanette, L. Y., & Wilmers, C.
 C. (2017). Fear of the human 'super predator' reduces feeding time in large carnivores. *Proceedings of the Royal Society B: Biological Sciences*, 284(1857), 20170433.
- Smith, J. A., Wang, Y., & Wilmers, C. C. (2015). Top carnivores increase their kill rates on prey as a response to human-induced fear. *Proceedings of the Royal Society B: Biological Sciences*, 282, 20142711.
- Studenmund, A. H., & Connor, D. (1982). The free-fare transit experiments. *Transportation Research Part A: General*, *16.4*, 261–269.
- Suraci, J. P., Clinchy, M., Zanette, L. Y., & Wilmers, C. C. (2019). Fear of humans as apex predators has landscape-scale impacts from mountain lions to mice. *Ecology Letters*, 22(10), 1578–1586.
- Traill, L. W., Brook, B. W., Frankham, R. R., & Bradshaw, C. J. A. (2010). Pragmatic population viability targets in a rapidly changing world. *Biological Conservation*, 143, 28–34.
- Trenham, P. C. (1998). *Demography, migration, and metapopulation structure of pond breeding salamanders*.
- Trenham, P. C., & Shaffer, H. B. (2005). Amphibian upland habitat use and its consequences for population viability. *Ecological Applications*, 15(4), 1158–1168.
- Trombulak, S. C., & Frissell, C. A. (2000). Review of ecological effects of roads on terrestrial and aquatic communities. *Conservation Biology*, *14*(1), 18–30.
- UCLA Institute of Transportation Studies. (2019). *Best Practices in Implementing Tactical Transit Lanes*. UCLA Institute of Transportation Studies.

- U.S. Department of Transportation. (2022). *Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories 2021*. U.S. Department of Transportation.
- U.S. Environmental Protection Agency. (2017). *Inventory of U.S. Greenhouse Gas Emissions* and Sinks 1990-2015. U.S. Environmental Protection Agency.
- van der Ree, R., Jaeger, J. A. G., van der Grift, E. A., & Clevenger, A. P. (2011). Effects of roads and traffic on wildlife populations and landscape function: Road ecology is moving toward larger scales. *Ecology and Society*, *16*(1), 48.
- Vickers, T. W., Sanchez, J. N., Johnson, C. K., Morrison, S. A., Botta, R., Smith, T., Cohen, B.
 S., Huber, P. R., Ernest, H. B., & Boyce, W. M. (2015). Survival and mortality of pumas (Puma concolor) in a fragmented, urbanizing landscape. *PLoS ONE*, *10*(7), 1–18. https://doi.org/10.1371/journal.pone.0131490
- Wang, D., Guan, D., Zhu, S., Kinnon, M. M., Geng, G., Zhang, Q., Zheng, H., Lei, T., Shao, S., Gong, P., & Davis, S. J. (2021). Economic footprint of California wildfires in 2018. *Nature Sustainability*, 4, 252–260.
- Wang, Y., Allen, M. L., & Wilmers, C. C. (2015). Mesopredator spatial and temporal responses to large predators and human development in the Santa Cruz Mountains of California. *Biological Conservation*, 190, 23–33.
- Wang, Y., Smith, J. A., & Wilmers, C. C. (2017). Residential development alters behavior, movement, and energetics in a top carnivore. *PlosOne*, 12(10), e0184687.
- Ware, H. E., Mcclure, C. J. W., Carlisle, J. D., & Barber, J. R. (2015). A phantom road experiment reveals traffic noise is an invisible source of habitat degradation. *Proceedings* of the National Academy of Sciences, 112(39), 12105–12109.

- Warren, R., Price, J., Fischlin, A., de la Nava Santos, S., & Midgley, G. (2011). Increasing impacts of climate change upon ecosystems with increasing global mean temperature rise. *Climatic Change*, 106(2), 141–177.
- Weinhold, B. (2011). Fields and forests in flames: Vegetation smoke and human health. *Environmental Health Perspectives*, *119*(9), A386–A393.
- Wilmers, C. C., Nisi, A. C., & Ranc, N. (2021). COVID-19 suppression of human mobility releases mountain lions from a landscape of fear. *Current Biology*, 31(17), 3952-3955.e3. https://doi.org/10.1016/j.cub.2021.06.050
- Wilmers, C. C., Wang, Y., Nickel, B., Houghtaling, P., Shakeri, Y., Allen, M. L., Kermish-Wells, J., Yovovich, V., & Williams, T. (2013). Scale dependent behavioral responses to human development by a large predator, the puma. *PLoS ONE*, 8(4).
- Yap, T. A., Rose, J. P., Anderson, I., & Prabhala, A. (2021). California Connections: HowWildlife Connectivity Can Fight Extinction and Protect Public Safety.
- Yap, T. A., Rose, J. P., Broderick, P., & Prabhala, A. (2021). Built to Burn: California's Wildlands Developments Are Playing With Fire.
- Yap, T. A., Rose, J. P., & Cummings, B. (2019). A Petition to List the Southern California/Central Coast Evolutionarily Significant Unit (ESU) of Mountain Lions as Threatened under the California Endangered Species Act (CESA).
- Yovovich, V., Allen, M. L., Macaulay, L. T., & Wilmers, C. C. (2020). Using spatial characteristics of apex carnivore communication and reproductive behaviors to predict responses to future human development. *Biodiversity and Conservation*, 29(8), 2589– 2603.

Zeller, K. A., Vickers, T. W., Ernest, H. B., & Boyce, W. M. (2017). Multi-level, multi-scale resource selection functions and resistance surfaces for conservation planning: Pumas as a case study. *PLoS ONE*, *12*(6), 1–20.