March 4, 2022

Sent via email

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Re: Sonoma Developmental Center Specific Plan Notice of Preparation

Dear Mr. Oh,

On behalf of the Center for Biological Diversity, we are writing to express our concerns regarding the proposed Sonoma Developmental Center Specific Plan ("Plan") and urge Sonoma County to consider alternatives and mitigation measures that would reduce the scale and footprint of the Plan and minimize impacts to wildlife connectivity and wildfire risk. The Plan as proposed would sever the last remaining artery of ecosystem connectivity in the area and result in harm to sensitive and imperiled species, loss of biodiversity, reduced resilience to climate change, and increased wildfire risk.

The Center for Biological Diversity ("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 and its members have worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in Sonoma County.

I. The Plan as proposed may have significant impacts on wildlife movement and habitat connectivity

The California Environmental Quality Act ("CEQA") requires an Environmental Impact Report ("EIR") to provide decision-making 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.) Moreover, CEQA requires a lead agency to mitigate to the extent feasible significant impacts. (CEQA Guidelines § 15064.4.)

If the County does move forward with preparing an EIR, the EIR must adequately assess and mitigate the Plan's impacts to local, regional, and global wildlife movement and habitat connectivity. The Notice of Preparation's ("NOP") Guiding Principle #3 is "Integrate Development with Open Space Conservation" (NOP at 4), and according to the Plan's 2021 Draft Vision and Guiding Principles, the underlying goal of this principle is to "Promote a sustainable, climate-resilient community surrounded by preserved open space and parkland that protects natural resources, fosters environmental stewardship, and maintains and enhances the permeability of the Sonoma Valley Wildlife Corridor for safe wildlife movement throughout the site" (Sonoma County, 2021). To adequately assess and mitigate the Plan's potential impacts on wildlife movement and habitat connectivity, the County must assess and disclose the best available science relative to the site, including data and information (e.g., wildlife camera data, roadkill data, movement tracking data, etc.) from its own studies as well as state agencies and local and regional stakeholders, including but not limited to the California Department of Fish and Wildlife ("CDFW"), Caltrans, local Tribes, Sonoma Land Trust, Audubon Canyon Ranch, UC Davis, the North Bay Bear Collaborative, and others that may have pertinent information and expertise.

A. The Plan area is within a critical connectivity area.

The Plan area falls within and makes up a large portion of the last remaining wildlife connectivity area linking protected open space across Sonoma Valley from Jack London State Park and Sonoma Mountain to the Mayacamas Mountains and beyond. CDFW identifies the Plan area as an "Irreplaceable and Essential Corridor" with high levels of biodiversity[1] and the Conservation Lands Network designates it as an "Area Essential to Conservation Goals."[2] The area has been found to be important for terrestrial and riparian connectivity essential for both wildlife movement and climate resilience (Gray et al., 2018). It is also immediately adjacent to an important undercrossing under State Route 12. The Sonoma Land Trust has identified multiple wide-ranging species, including deer, bobcats, coyotes, and river otters, that actively use and move through the area.

The Sonoma Developmental Center has been unoccupied by people since 2018 and likely serves as both live-in and move-through habitat for numerous species, whether they were present pre-development, while people were using the campus, or have established or re-established there since the campus became vacant. Placing development in this critical connectivity area, even if it is within the existing development footprint, will undoubtedly have significant impacts to wildlife connectivity and sensitive and imperiled species in the area, from mountain lions to California red-legged frogs. New development that includes commercial and industrial facilities and new roads and infrastructure will fortify existing barriers, increase human activities, and severely degrade this already constrained connectivity area, which will result in both direct and indirect effects to species and ecosystems and reduce climate resilience.

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[1] CDFW Areas of Conservation Emphasis available at https://apps.wildlife.ca.gov/ace/ (Accessed February 18, 2022)

[2] CLN Explorer Reporting Tool available at: https://www.bayarealands.org/explorer-v2 (Accessed February 18, 2022).

B. Roads and development will result in direct and indirect impacts to wildlife movement.

The EIR must adequately disclose the existing conditions of the site and adequately assess and mitigate the Plan's impacts to wildlife connectivity. 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., 2018, 2021; Riley et al., 2014; Saremi et al., 2019; Vickers et al., 2015), increase local extinction risk in amphibians and reptiles (Brehme et al., 2018; Cushman, 2006; Delaney et al., 2021), cause high levels of avoidance behavior and mortality in birds and insects (Benítez-López et al., 2010; 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 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 between high quality habitat areas in heterogeneous landscapes 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 while reducing climate change resilience.

Edge effects of development in and adjacent to open space, like the proposed Plan, will likely impact key, wide-ranging predators, such as mountain lions and bobcats (Crooks, 2002; Delaney et al., 2010; Lee et al., 2012; Riley et al., 2006; Smith et al., 2015, 2017; Vickers et al., 2015; Y. Wang et al., 2017), as well as smaller species with poor dispersal abilities, such as song birds, small mammals, and herpetofauna (Benítez-López et al., 2010; Cushman, 2006; Delaney et al., 2010; Gray, 2017; Kociolek et al., 2011; Slabbekoorn & Ripmeester, 2008). Limiting movement and dispersal can affect species' ability to find food, shelter, mates, and refugia after disturbances like fires or floods. Individuals can die off, populations can become isolated, sensitive species can become locally extinct, and important ecological processes like plant pollination and nutrient cycling can be lost. Negative edge effects from human activity, such as traffic, lighting, noise, domestic pets, pollutants, invasive weeds, and increased fire frequency, have been found to be biologically significant up to 300 meters (~1000 feet) away from anthropogenic features in terrestrial systems (Environmental Law Institute, 2003)

C. Wildlife connectivity is critical for biodiversity resilience and climate change adaptability.

Given the Plan's location in the last remaining connection between open space on Sonoma Mountain and Jack London State Park and the Mayacamas, its impacts to wildlife connectivity will have a significant effect on the area's overall biodiversity and resilience to climate change. With the driest 22-year period in 1,200 years in the western US and drought conditions that will likely continue (Williams et al., 2022) climate change refugia and resilience provided by ecosystems like riparian areas will be ever more critical for species survival and ecosystem health. As discussed in a 2021 Center report (Yap, Rose, Anderson, et al., 2021):

> Climate change is worsening ecosystem stress and species extinction risk (Trisos et al., 2020). Increasing variability and extremes in temperature, wind, and precipitation are all products of a warming climate, leaving species struggling to adapt. As a result, species' genes are changing, physiological and physical features such as body size are changing, ranges are shifting as species try to maintain a suitable climate space, and numerous species are expressing new breeding and migration behaviors (Scheffers et al., 2016).
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> For example, some plants are budding and flowering earlier, some marine and freshwater fishes are spawning either earlier or later, and some species with temperature-dependent sex determination are experiencing shifts in sex ratios. ***Climate-related local extinctions have already occurred in hundreds of plant and animal species*** (Wiens, 2016). And one study found that terrestrial bird and mammal populations that are experiencing greater climate warming are more likely to be experiencing greater population declines (Spooner et al., 2018). Reportedly, climate change is already impacting 82% of key ecological processes that form the foundation of healthy ecosystems (Scheffers et al., 2016). If climate change goes unabated, more than one-third of all plant and animal species could become extinct in the next 50 years (Román-Palacios & Wiens, 2020).
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> ***Wildlife connectivity is critical for biodiversity resilience and climate change adaptability***. A permeable landscape that has multiple pathways or linkages between habitat patches allows a wide variety of species to adjust to shifts in resource availability (Mcrae et al., 2012; Olson & Burnett, 2013; Pinto & Keitt, 2008). For smaller species with poor dispersal abilities, like San Francisco garter snakes, California red-legged frogs and San Bernardino kangaroo rats, multiple linkages can provide habitat while still allowing for their dispersal.
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> Multiple connections also help populations persist after extreme events worsened by climate change. During floods, landslides or wildfires, these pathways provide escape routes or refugia for animals seeking safety (Cushman et al., 2013; Mcrae et al., 2008; Olson & Burnett, 2013). Such events can cause local extinctions in small, isolated populations.

> Prior to roads and development severely fragmenting and degrading habitats, a species could persist because individuals from neighboring populations would be able to recolonize an area that experiences a local extinction. But without adequate connectivity, recolonization and species persistence are improbable.

It is important that the EIR also consider the Plan's impacts to corridor redundancy (*i.e.* the availability of alternative pathways for movement) because such redundancy allows for improved functional connectivity and climate change resilience. Compared to a single pathway, multiple connections between habitat patches increase the probability of movement across landscapes by a wider variety of species, and they provide more habitat for low-mobility species while still allowing for their dispersal (Mcrae et al., 2012; Olson & Burnett, 2013; Pinto & Keitt, 2008). Corridor redundancy also provides resilience to uncertainty, impacts of climate change, and extreme events, like flooding or wildfires, by providing alternate escape routes or refugia for animals seeking safety (Cushman et al., 2013; Mcrae et al., 2008, 2012; Olson & Burnett, 2013; Pinto & Keitt, 2008). Therefore, Plan design and implementation should avoid or minimize any further constriction of the connectivity area and mitigation should include enhancing east-west connectivity between protected adjacent open space.

D. Riparian ecosystems support high levels of biodiversity and facilitate wildlife movement.

When assessing impacts to wildlife movement and habitat connectivity, the County must analyze the Plan's potential impacts to riparian corridors. It is estimated that 90-95% of historic riparian habitat in the state has been lost (Bowler, 1989; Riparian Habitat Joint Venture, 2009). Using 2002 land cover data from CalFire, the Riparian Habitat Joint Venture estimated that riparian vegetation makes up less than 0.5% of California's total land area at about 360,000 acres (Riparian Habitat Joint Venture, 2004). This is alarming because riparian habitats perform a number of biological and physical functions that benefit wildlife, plants, and humans, and loss of what little is left will have severe, harmful impacts on special-status species, overall biodiversity, and ecosystem function. California cannot afford to lose more riparian corridors.

Riparian ecosystems have long been recognized as biodiversity hotspots performing important ecological functions in a transition zone between freshwater systems and upland habitats. Many species that rely on these aquatic habitats also rely on the adjacent upland habitats (*e.g.*, riparian areas along streams, and grassland habitat adjacent to wetlands). In fact, 60% of amphibian species, 16% of reptiles, 34% of birds and 12% of mammals in the Pacific Coast ecoregion depend on riparian-stream systems for survival (Kelsey and West 1998). Many other species, including mountain lions and bobcats, often use riparian areas and natural ridgelines as migration corridors or foraging habitat (Dickson et al, 2005; Hilty & Merenlender, 2004; Jennings & Lewison, 2013; Jennings & Zeller, 2017). Additionally, fish rely on healthy upland areas to influence suitable spawning habitat (Lohse et al. 2008), and encroachment on these habitats and over-aggressive removal of riparian areas have been identified as a major driver of declines in freshwater and anadromous fish (e.g., Stillwater Sciences 2002; Lohse et al. 2008; Moyle et al. 2011). Therefore, large buffers that allow for connectivity between the aquatic resource and upland habitat in riparian areas is vital for many species to persist.

A literature review found that recommended buffers around aquatic resources for wildlife often far exceeded 100 meters (~325 feet), well beyond the largest buffers implemented in practice (Robins, 2002). For example, Kilgo et al. (1998) recommend more than 1,600 feet of riparian buffer to sustain bird diversity. In addition, amphibians, which are considered environmental health indicators, 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 to migrate about 600 feet between breeding ponds and non-breeding upland habitat and streams, with some individuals roaming over 4,500 feet from the water (Fellers & Kleeman, 2007). Newts have been documented traveling up to a mile from breeding ponds (Trenham, 1998). Western pond turtle nests have been found up to 1,919 feet from aquatic habitats and individuals have been documented to move regularly between aquatic habitats with long-distance movements of up to 2,018 feet (Sloan, 2012). Accommodating the more long-range dispersers is vital for continued survival of species populations and/or 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 streams and other aquatic resources, as well as connectivity corridors between heterogeneous habitats. Again, the EIR must adequately assess and mitigate impacts to local, regional, and global wildlife movement and habitat connectivity.

E. The County should consider an alternative with a reduced and/or modified development footprint and adopt robust mitigation measures to minimize impacts to wildlife connectivity.

Given the potential for the Plan to fragment and remove important habitat in the last-remaining linkage between open space on Sonoma Mountain and Jack London State Park and the Mayacamas, the Center urges the County to consider an alternative that would significantly reduce the scale and the footprint of the Plan. In addition, the Center urges the adoption of mitigation measures that address the needs of multiple target species in the affected area. Measures that minimize lighting, noise, pesticide use, and the establishment of invasive plants, particularly in areas adjacent to protected open space, should be implemented.

Given that the Plan area is adjacent to an important undercrossing under State Route 12 and would add new roads and increase traffic in the area, wildlife crossings and associated infrastructure on new and existing roads (both within the Plan area and nearby) should be designed and implemented to accommodate the different behaviors and needs of the various target species in the area. For example, smaller species with poor dispersal abilities, like rodents and herpetofauna, would require more frequent intervals of crossings on roads compared to larger wide-ranging species, like mountain lions or coyotes, to increase their chances of finding a crossing. Gunson et al. (2016) recommend that crossing structures generally be spaced about 300m (~0.19mi) apart for small animals when transportation infrastructure bisects large expanses of continuous habitat, though they recognize that some amphibians may need more frequent crossings no more than 50m (~0.03mi) apart. There are several resources that provide guidelines

for implementing effective wildlife crossings that should be considered when designing and implementing crossings (e.g., Brehme & Fisher, 2020; Gunson et al., 2016; Kintsch et al., 2015; Langton & Clevenger, 2021). Multiple crossings designed for different target species may be required on new or existing roads.

In-depth analyses that include on-the-ground movement studies of which species are moving in the area and their home range area, habitat use, and patterns of movement are needed to determine how to best implement such crossings and which locations are most appropriate for crossings. In addition, associated crossing infrastructure (*e.g.*, exclusionary fencing appropriate for target species, berms to buffer crossings from sound and light) should be included to improve chances of wildlife using crossings, and such crossings and associated infrastructure should be designed and built in consultation with local and regional experts, including agency biologists. And to improve the effectiveness of any wildlife crossings, there should be protected habitat on both sides of the crossing; therefore, mitigation should also include acquiring unprotected lands on both sides of the roads where a wildlife crossing would be implemented, again, in consultation with local conservation organizations and stakeholders, and preserving, monitoring, and adaptively managing those lands in perpetuity to ensure that the wildlife crossings and associated infrastructure remain functional over time. In addition, education and awareness of the area's value to wildlife connectivity and biodiversity should be provided to residents and visitors.

II. The EIR must adequately assess fire history and impacts to wildfire risk.

Wildfires due to lightning strikes and Indigenous cultural burning have occurred on California's landscapes for millennia. They're a natural and necessary process for many of California's ecosystems. But some of the recent fires have been exceptionally harmful to communities. In the past 200 years since European colonization, forced relocation and cultural genocide of Native Tribes, fire suppression and poor land management combined with poor land-use planning have shifted historical fire regimes throughout the heterogeneous ecosystems of the state. In addition, hotter, drier and more extreme weather conditions due to climate change make the landscape more conducive to wildfire ignitions and spread. Almost all (95-97%) contemporary wildfires have been caused by humans and/or human infrastructure (Balch et al., 2017); therefore, the placement of new roads and development in and/or adjacent to high and very high fire hazard severity zones requires careful and comprehensive analyses of the area's fire history, the various ecosystems' fire ecology, and potential mitigation measures to reduce risk of ignition and fire within the Plan area and spreading to nearby communities.

A. The County needs to make a concerted effort to incorporate traditional ecological knowledge and Indigenous science into their analyses.

Indigenous communities should be more included in climate change and wildfire discourse. They are disproportionately impacted by wildfire. Native Americans were found to be six times more likely than other groups to live in high fire-prone areas, and high vulnerability due to socioeconomic barriers makes it more difficult for these communities to recover after a large wildfire (Davies et al., 2018). In addition, farmworkers, who are majority people of color and often include migrant workers that come from Indigenous communities, often have less access to healthcare due to immigration or economic status. They are more vulnerable to the

health impacts of poor air quality due to increased exposure to air pollution as they work. Yet farmworkers often have to continue working while fires burn, and smoke fills the air, or risk not getting paid (Herrera, 2018; Kardas-Nelson et al., 2020; Parshley, 2018).

Ramos (2022) states, "Indigenous communities have often been marginalized in the sciences through research approaches that are not inclusive of their cultures and histories." Traditional ecological knowledge ("TEK") is often excluded from analyses or distilled to conform to Western science (Ramos, 2022). EIRs often fail to acknowledge that Indigenous communities and cultural burning played a role in California's historical fire activity and often only mention previous wildfires in the area in CalFire records. This perpetuates the exclusion and marginalization of Indigenous communities and TEK. Consultation with local Native Tribes and incorporation of Indigenous science, including but not limited to oral histories, ethnographies (that may include burn scars and charcoal records), and archeological data should be incorporated in fire history analysis. As a society, we need to work towards integrative research that "transcends disciplinary boundaries" and employs a range of methodological options to get a deeper understanding of the relationship between people and ecosystems (Ramos, 2022). Doing so will help inform fire management strategies and mitigation measures that work towards reducing harms of wildfire to people while facilitating beneficial fire for the appropriate ecosystems.

B. The EIR must adequately assess and mitigate impacts to wildfire risk.

The EIR must acknowledge and discuss that development and human infrastructure in high fire-prone areas increases the risk of igniting wildfires. As detailed in a 2021 Center Report (Yap, Rose, Broderick, et al., 2021), development in highly fire-prone areas increases unintentional ignitions, places more people at risk (within and downwind of the Plan area), and destroys native shrubland habitats that support high levels of biodiversity. Almost all contemporary wildfires in California (95-97%) are caused by humans in the wildland urban interface (Balch et al., 2017; Radeloff et al., 2018; Syphard et al., 2007; Syphard & Keeley, 2020). For example, the 2019 Kincade Fire, 2018 Camp and Woolsey fires, and 2017 Tubbs and Thomas fires were sparked by powerlines or electrical equipment. And although many of the 2020 fires were sparked by a lightning storm, the Apple Fire was caused by sparks from a vehicle, the El Dorado Fire was caused by pyrotechnics at a gender-reveal celebration, the Blue Ridge Fire was likely caused by a house fire, and electrical equipment is suspected to have ignited the Silverado and Zogg fires. Roads and energy infrastructure are sources of wildfire ignitions, and the Plan will be placing both in high and very high fire hazard severity zones.

Recent wildfires have been exceptionally harmful to people. 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. Human-caused wildfires at the urban wildland interface that burn through developments are becoming more common with housing and human infrastructure extending into fire-prone habitats, and homes and structures can add fuel to fires and increase spread (Knapp et al., 2021). This is increasing the frequency and toxicity of emissions near communities in and downwind of the fires. Buildings and structures often contain plastic materials, metals, and various stored chemicals that release toxic

chemicals when burned, such as pesticides, solvents, paints, and cleaning solutions (Weinhold, 2011). This has been shown with the 2018 Camp Fire that burned 19,000 structures; the smoke caused dangerously high levels of air pollution in the Sacramento Valley and Bay Area and CARB found that high levels of heavy metals like lead and zinc traveled more than 150 miles (CARB, 2021).

In addition, there are significant economic impacts of wildfires on residents throughout the state. One study estimated that wildfire damages from California wildfires in 2018 cost $148.5 billion in capital losses, health costs related to air pollution exposure, and indirect losses due to broader economic disruption cascading along with regional and national supply chains (D. Wang et al., 2021). Meanwhile the cost of fire suppression and damages in areas managed by the California Department of Forestry and Fire (Cal Fire) has skyrocketed to more than $23 billion during the 2015-2018 fire seasons.

The EIR must adequately mitigate the Plan's impacts to wildfire ignition risk. New infrastructure in high fire-prone areas should be avoided. If unavoidable, mitigation measures should require structures to have ember-resistant vents, fire-resistant roofs, and irrigated defensible space immediately adjacent to structures. External sprinklers with an independent water source could reduce structures' flammability. Rooftop solar and clean energy microgrids could reduce fire risk from utilities' infrastructure during extreme weather. The County should commit to mitigation measures that include equitably retrofitting existing communities near the Plan area with similar fire-resilient measures and providing wildfire personal protective equipment (e.g., N95 masks, air purifiers) to nearby communities. Transmission lines could be placed underground. In addition, education and awareness for residents, visitors, and nearby communities should be provided and include how to reduce ignition risk.

In addition, wildfire mitigation must include emergency services and evacuation plans that are inclusive and consider diverse populations and vulnerable groups. Wildfire impacts disproportionately affect low-income and minority communities. As discussed in the Center's 2021 Built to Burn report (Yap, Rose, Broderick, et al., 2021):

> Past environmental hazards have shown that those in at-risk populations (*e.g.,* low-income, elderly, disabled, non-English-speaking, homeless) often have limited resources for disaster planning and preparedness (Richards, 2019). Vulnerable groups also have fewer resources to have cars to evacuate, buy fire insurance, implement defensible space around their homes, or rebuild, and they have less access to disaster relief during recovery (Davis, 2018; Fothergill & Peak, 2004; Harnett, 2018; Morris, 2019; Richards, 2019).
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> In addition, emergency services often miss at-risk individuals when disasters happen because of limited capacity or language constraints (Richards, 2019). For example, evacuation warnings are often not conveyed to disadvantaged communities (Davies et al., 2018). In the aftermath of wildfires and other environmental disasters, news stories have repeatedly documented the lack of multilingual evacuation warnings leaving non-English speakers in danger. (Axelrod, 2017; Banse, 2018; Gerety, 2015; Richards, 2019). Survivors are left

without resources to cope with the death of loved ones, physical injuries and emotional trauma from the chaos that wildfires have inflicted on their communities.

Health impacts from wildfires, particularly increased air pollution from fine particulates ($PM_{2.5}$) in smoke, also disproportionately affect vulnerable populations, including low-income communities, people of color, children, the elderly and people with pre-existing medical conditions (Delfino et al., 2009; Hutchinson et al., 2018; Jones et al., 2020; Künzli et al., 2006; Reid et al., 2016).

Increased $PM_{2.5}$ levels during wildfire events have been associated with increased respiratory and cardiovascular emergency room visits and hospitalizations, which were disproportionately higher for low socioeconomic status communities and people of color (Hutchinson et al., 2018; Jones et al., 2020; Liu et al., 2017; Reid et al., 2016). Similarly, asthma admissions were found to have increased by 34% due to smoke exposure from the 2003 wildfires in Southern California, with elderly and child age groups being the most affected (Künzli et al., 2006).

Farmworkers, who are majority people of color, often have less access to healthcare due to immigration or economic status. They are more vulnerable to the health impacts of poor air quality due to increased exposure to air pollution as they work. Yet farmworkers often have to continue working while fires burn, and smoke fills the air, or risk not getting paid (Herrera, 2018; Kardas-Nelson et al., 2020; Parshley, 2018).

III. Conclusion

We are in the midst of a global extinction crisis, with species going extinct at a rate of over 1,000 times the background rate and more than one million species on track to become extinct over the coming decades (Pimm et al., 2014). The County should work to safeguard the region's biodiversity and remaining wildlife habitat. Because the Plan could further degrade connectivity for sensitive and imperiled species, reduce biodiversity and climate change resilience, and increase wildfire risk, we ask the County to consider Plan alternatives that reduce the scale and footprint of the Plan and implement effective mitigation measures to minimize impacts to wildlife connectivity, habitat loss, and wildfire risk.

Thank you for the opportunity to submit comments on the Plan. Please include the Center on your notice list for all future updates to the Plan and do not hesitate to contact the Center with any questions at the email addresses listed below.

Sincerely,

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(*Provided via OneDrive*)

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