

April 30, 2020

Sent via email and FedEx

Trayci Nelson Project Planner Bradbury City Hall 600 Winston Avenue Bradbury, CA 91008

Email to: tnelson@cityofbradbury.org

RE: Comments on Notice of Preparation of an Environmental Impact Report for Chadwick Ranch Estates Specific Plan, SCH# 2020020548

Ms. Nelson,

These comments are submitted on behalf of the Center for Biological Diversity ("the Center") regarding the Notice of Preparation of an Environmental Impact Report ("EIR") for the Chadwick Estates Specific Plan ("the Project"). The Center urges the City to undertake a thorough and comprehensive environmental review of the Project as required under the California Environmental Quality Act ("CEQA"), prior to considering approval. Despite the Project's relatively small scale, the Project poses significant environmental impacts to the sensitive ecological setting of the proposed site. The EIR should fully address and analyze at a minimum the Project's impacts to sensitive species and habitat, fire hazards, water quality, aesthetics and all reasonable alternatives.

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 1.7 million members and supporters throughout California and the United States. The Center has worked for many years to protect imperiled plants and wildlife, wildlife connectivity, open space, air and water quality, and overall quality of life for people in Los Angeles County.

Under CEQA, an EIR must 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.) The proposed Project will directly and indirectly impact over 100 acres of open space and natural habitat to construct mansions for a few ultra-rich

buyers. The EIR must fully disclose these impacts, so that the public can fully understand the publicly born costs associated with the Project that likely delivers few public benefits.

The DEIR Must Assess the Fire Risks Posed by the Project

California has experienced increasingly destructive wildfires over the course of the past decade, a trend which, fueled by drought and climate change, is likely to continue. The 2018 wildfire season in California was the "deadliest and most destructive" ever recorded, both in terms of acres burned and damage caused. The increasing frequency and intensity of wildfires in California highlight the need to reassess where new development will be located. Housing along the urban-wildland interface exposes residents to greater fire risks, while simultaneously increasing the probability of fire ignition. The Project proposes residential development in the hills and canyons of the San Gabriel Mountains that delineate the boundary between Angeles National Forest and the City of Bradbury. (Initial Study ("IS") at 3-1.) The DEIR must analyze the wildfire risks and impacts associated with the Project; and establish comprehensive mitigation measures to address those effects.

The Initial Study acknowledges the potential wildfire impacts, as the Project is located in a "Very High Fire Hazard Severity Zone." (IS at 3-8.) Such a designation requires certain measures to be taken by homeowners, as noted in the Initial Study. (*Id.*) But these measures have proven to be insufficient in the face of recent fires in Southern California; therefore, the EIR should assess preventative mitigation measures that go beyond the statutorily required minimum. CEQA requires the EIR to assess the full range of wildfire impacts and potential mitigation so that the public and decision-makers can properly weigh the potentially catastrophic costs of a wildfire against the Project's purported benefits.

In its wildfire impact assessment, the EIR should also clarify the management of the Project's open space/conservation areas. The Initial Study states that open space will make up approximately 51 percent of the Project site, on which development will be prohibited. (IS at 3-2.) The long-term ownership and management of these spaces will be the responsibility of a yet-to-be-named conservancy. (*Id.*) The EIR should clearly outline the duties of each landowner in terms of wildfire prevention as well as provide the mechanisms for enforcing such duties. Adherence to statutorily imposed fuel modification zones and defensible areas will not protect the open space beyond the residential development pads. The EIR must identify the fire risk impacts to undeveloped areas of the Project; and provide mitigation where feasible.

The Project's Impacts on Water Resources

The Project's cut and fill activities have the potential to significantly alter the area's drainage patterns. (IS at 4.10-1, 4.10-3.) The Project area serves as both a buffer to, and

¹ Calfire Incident Information, https://www.fire.ca.gov/incidents/2018/.

² The Guardian, *Last year's wildfires were the most expensive in California history*, https://www.theguardian.com/us-news/2019/may/08/california-2018-wildfires-most-expensive

³ Radeloff et al. Rapid growth of the US wildland-urban interface raises wildfire risk. Proceedings of the National Academy of Sciences, 2018, www.pnas.org/cgi/doi/10.1073/pnas.1718850115.

⁴ Southern California Public Radio, '*Defensible space*' *couldn't keep Thomas fire from burning Ventura County*. 12/19/17, https://www.scpr.org/news/2017/12/19/79035/defensible-space-couldn-t-keep-thomas-fire-from-bu/

extension of, the vital ecological systems of the Angeles National Forest and San Gabriel Mountains. Changes to the rate, timing and direction of drainage would impact the quality of area riparian and in-stream habitat, constrain the range of water-reliant plant and animal species, and alter groundwater recharge. Specifically, the Project will likely impact federally protected waters. (IS at 4.4-2.) The EIR must fully assess these impacts and provide mitigation through adequate setbacks and erosion control protocols. As the effects of climate change become more apparent, it is more important than ever for projects in Southern California to provide comprehensive analysis of impacts to water resources.

The Initial Statement acknowledges the Project may significantly deplete groundwater supplies, and that the Project will be required to drill a well to replenish the underlying aquifer to compensate for the Project's use of groundward. (IS at 4.10-2.) The EIR must first establish the baseline drainage and recharge regimes, then provide detailed analysis of how these conditions will be impacted by the Project.⁵ The amount and location of runoff, as well as stream bed recharge, will be affected by the Project's topographic alterations. The residential water use, while certainly a factor to consider, is not the only facet of the Project that will impact groundwater recharge. The EIR should provide analysis of all potential Project impacts on groundwater.

Biological Surveys and Mapping

The Center requests that thorough, seasonal surveys be performed for sensitive plant species and vegetation communities, and animal species under the direction and supervision of the BLM and resource agencies such as the US Fish and Wildlife Service and the California Department of Fish and Game. Full disclosure of survey methods and results to the public and other agencies without limitations imposed by the applicant must be implemented to assure full CEQA/ESA compliance.

Confidentiality agreements or non-disclosure agreements regarding environmental resources must not be required of any biologists participating in the surveys in support of the proposed project. Surveys for the plants and plant communities should follow California Native Plant Society ("CNPS") and California Department of Fish and Wildlife ("CDFW") floristic survey guidelines⁶ and should be documented as recommended by CNPS policy guidelines⁷. A full updated floral inventory of all species encountered needs to be documented and included in the EIR. Surveys for animals should include an evaluation of the California Wildlife Habitat Relationship System's ("CWHR") Habitat Classification. All rare species (plants or animals) need to be documented with a California Natural Diversity Data Base ("CNDDB") form and submitted to CDFW using the CNDDB Form⁸ as per the State's instructions⁹.

⁵ Woodward Park Homeowners Assn, Inc. v. City of Fresno (2007) 150 Cal.App.4th 683, 707 The court, in discussing § 15125 of the Guidelines, stated the EIR must "compare what will happen if the project is built with what will happen if the site is left alone."

⁶ California Native Plant Society, Botanical Survey Guidelines, https://cnps.org/wp-content/uploads/2018/03/cnps_survey_guidelines.pdf and https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline

⁷ CNPS, https://www.cnps.org/wp-content/uploads/2018/04/collecting-guidelines-documentation.pdf

⁸ CDFW, California Natural Diversity Data Base, Online Field Survey Form, https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data

The Center requests that the vegetation maps be at a large enough scale to be useful for evaluating the impacts. Vegetation/wash habitat mapping should be at such a scale to provide an accurate accounting of wash areas and adjacent habitat types that will be directly or indirectly affected by the proposed activities. A half-acre minimum mapping unit size is recommended, such as has been used for other development projects. Habitat classification should follow CNPS' Manual of California Vegetation. (Sawyer et. al. 2009).

Project Impacts on Biological Resources

The Project site encompasses an area of immense ecological value in the foothills of the San Gabriel Mountains. This value arises not only from the wildlife and habitat present within Project boundaries but from the site's proximity to the Angeles National Forest, Duarte Wilderness Preserve and the San Gabriel Valley Sensitive Ecological Area 19 ("SEA"). The Project will directly alter the landscape of the proposed site and will indirectly impact the surrounding areas by increasing human-borne disturbances, reducing ecological buffer zones, and constraining wildlife movement. The EIR must fully analyze the direct and indirect impacts of the Project on the area's biological resources.

A fully CEQA-compliant EIR must contain a complete and up-to-date plant and wildlife survey of the potentially impacted habitats. ¹⁰ The adequacy of the Project's EIR will depend on properly describing the physical environmental conditions in and around the Project site; this must include a full accounting of the biological resources that may be affected by the Project. ¹¹ A number of plant and animal species utilize habitat in and around the Project site, a complete survey will allow the public and decision-makers to fully comprehend the scope of Project impacts.

One such species is the San Gabriel chestnut snail ("SGCS"), a terrestrial snail found only in the San Gabriel Mountains and foothills. ¹² The SGCS is ranked as imperiled on the "Special Animals List" compiled by CDFW. ¹³ SGCS is known to occur in the vicinity of the project. ¹⁴ Similar to many terrestrial snail populations, SGCS is particularly vulnerable to development-related habitat destruction because of their limited dispersal ability. ¹⁵ As noted in the Petition, via reference to a CDFW comment letter, the previously proposed Oakview Estates project posed "immitigable" impacts to SGCS individuals present on that project site. ¹⁶ The Chadwick Estates Project would have the same impacts, as it is located adjacent to the proposed Oakview Estates site.

⁹ Id. see "User Guide."

¹⁰ CEQA Guidelines, 14 CCR § 15125.

¹¹ Id

¹² San Gabriel chestnut snail ESA listing Petition, p. 4

¹³ California Department of Fish and Wildlife, California Natural Diversity Database, Special Animals List (August 2019), available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406

¹⁴ Natural History Museum of Los Angeles County, Snails and slugs Living in Metropolitan Environments Data, https://www.inaturalist.org/observations?place_id=any&taxon_id=210624.

¹⁵ San Gabriel chestnut snail ESA listing Petition, p. 12.

¹⁶ Id. at p. 13.

Specifically, the SGCS population in the area would be significantly impacted by the cut and fill operations, alterations to hydrologic patterns, and ongoing fuel modification measures. The SGCS is dependent on moist microhabitats, such that the alteration of drainage patterns from Project activities could eliminate vital habitat. The development will also introduce barriers to dispersal, such as roads and other topographic features, further hindering SGCS survival in an altered habitat. The EIR should include surveys of the Project area and the surrounding area to ascertain the resident SGCS population and its habitat needs. Numerous other species and rare vegetation communities have been documented in the general area of the Project,¹⁷ the DEIR must also include surveys and analysis that clearly demonstrates present wildlife to the public and decision-makers.

It is critically important that the DEIR disclose and analyze the Project's potential impacts to mountain lions, including habitat fragmentation, increased lighting and noise associated with development and human activities, increased traffic on roads, use of pesticides and rodenticides, or increased risk of wildfires. There is ample scientific literature that shows that mountain lions in and near the Project area are struggling and that such human activities and land use planning can have adverse impacts on mountain lions. Continued habitat loss and fragmentation has led to 10 genetically isolated populations within California. Several populations in Southern California and along the Central Coast are facing an extinction vortex due to high levels of inbreeding, low genetic diversity, and high human-caused mortality rates from car strikes on roads, depredation kills, rodenticide poisoning, poaching, disease, and increased human-caused wildfires. 18 This is detailed 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, Rose, & Cummings, 2019). On April 16, 2020, the California Fish and Game Commission voted unanimously to advance the Southern California and Central Coast mountain lions to candidacy under the California Endangered Species Act. 19

Furthermore, Studies have shown that mountain lions alter their behavior to avoid humans and human disturbances (*e.g.*, development and associated noise and lighting). For example, mountain lions have been found to avoid human voices and move more cautiously when hearing human voices.²⁰ The presence or perceived presence of humans has been found to reduce overall feeding time.²¹ Nocturnal patterns of movement and stasis suggest that mountain lions generally avoid areas with human disturbance²², and although they are generally most active at dusk and dawn, their peak activities have been observed to shift to more nocturnal patterns when they are closer to human disturbance (Van Dyke et al., 1986). And although mountain lions will use moderately disturbed areas as they travel and hunt²³, occupancy is lower in developed areas and they are more likely to use developed areas if they border open spaces

¹⁷ California Department of Fish and Wildlife, California Natural Diversity Database QuickView Tool, accessed 4-29-2020. Available at: https://apps.wildlife.ca.gov/bios/?tool=cnddbQuick.

¹⁸ Benson, Mahoney, et al., 2016; Benson et al., 2019; Ernest et al., 2003; Ernest, Vickers, Morrison, Buchalski, & Boyce, 2014; Gustafson et al., 2018; Riley et al., 2014; T. W. Vickers et al., 2015.

¹⁹ California Fish & Game Commission, Notice of Findings, April 21, 2020.

²⁰ Suraci, Clinchy, Zanette, & Wilmers, 2019.

²¹ Smith et al., 2017; Smith, Wang, & Wilmers, 2015.

²² Dickson & Beier, 2002; Dickson, Jennes, & Beier, 2005.

²³ Gray, Wilmers, Reed, & Merenlender, 2016; Wilmers et al., 2013; Zeller, Vickers, Ernest, & Boyce, 2017.

(Wang, Allen, & Wilmers, 2015). Thus, mountain lions require sufficient room to roam away from human-disturbed areas and expansive, intact, heterogeneous habitats. ²⁴

The DEIR must also adequately assess and mitigate the impacts to mountain lions and connectivity from increased wildfire risk due to the Project. Although fire is a natural disturbance in California ecosystems, sprawl development with low/intermediate densities extending into habitats that are prone to fire, like the proposed Project, have led to more frequent wildfires that burn larger areas. ²⁵ Placing more sprawl development, infrastructure, and people in fire-prone areas could lead to more human-caused wildfires. Increased frequency of wildfires poses a threat to the survival of mountain lions in and near the Project area. Although mountain lions are highly mobile and generally able to move away from wildfires, in severe weather conditions wind-driven fires can spread quickly – they can cover 10,000 hectares in one to two days, as embers are blown ahead of the fires and towards adjacent fuels (e.g., flammable vegetation, structures) (Syphard, Keeley, & Brennan, 2011). If their movement is constrained by roads and development and they are unable to access escape routes, then their chances of surviving wildfires are greatly reduced. (Vickers et al., 2015) documented one death of a collared mountain lion in the Santa Ana Mountains and one in the Eastern Peninsular Range due to human-caused wildfires, and the deaths of two collared mountain lions in the Santa Monica Mountains in 2018 have been attributed to the Woolsey Fire. Environmentally stochastic events (e.g., wildfires, flooding) could destabilize small mountain lion populations and make them vulnerable to extinction. ²⁶ In addition, increased frequency of fire ignitions can cause shifts in natural fire regimes, which can lead to large-scale landscape changes, such as vegetation-type conversion or habitat fragmentation, which can impact wide-ranging species like the mountain lion (Jennings, 2018).

As the urban-wildland boundary continues to encroach on natural habitat at the edge of Angeles National Forest, the importance of habitat connectivity increases. The Project represents the northward march of residential development toward Angeles and related areas. The Initial Study touts the percentage of the Project footprint comprised of open space/no built areas. (IS at 3-2.) If these areas are to be viewed as an ecological asset in the Project approval process, the EIR must explain the nature and management of the "open space." Once the biological resource survey is conducted for the Project site, the EIR should provide an impact assessment, and management guidance for the open space. This inquiry should note the extent of municipal control over activities on privately held land, and the associated impacts on sensitive biological resources and the efficacy of proposed mitigation measures.

Similarly, the management practices deployed on the open space should be assessed in light of the site's value as a habitat corridor for wildlife movement. The construction of fencing and roads, as well as ridge and slope alterations, can hinder the foraging and dispersal movements of area wildlife populations.

Reasonable and Prudent Alternatives

²⁴ Beier, Choate, & Barrett, 1995; Dickson & Beier, 2002; Kertson, Spencer, Marzluff, Hepinstall-Cymerman, & Grue, 2011; W. Vickers, Zeller, Ernest, Gustafson, & Boyce, 2017.

²⁵ Syphard, Radeloff, Hawbaker, & Stewart, 2009; Syphard et al., 2007.

²⁶ Benson, Mahoney, et al., 2016; Benson et al., 2019

The EIR must present and consider "a reasonable range of potentially feasible alternatives" in order to facilitate "informed decision-making and public participation." The EIR's alternative analysis should assess the proposed size and location of the Project. While large residential estates are nothing new in Bradbury, the enormous size of the proposed residences begs reconsideration. The individual lots will contain varied sizes of developable areas, ranging from 20,000 square feet up to 49,000 square feet. (IS at 3-2.) Existing inventory of luxury estates currently on the market in Bradbury should be considered when discussing the need for the Project. There are currently two residences in the 16,000-18,000 square feet range that are listed for approximately 15 million dollars each, both estates have been on the market for nearly 6 months. The EIR should include an economic feasibility analysis of the Project to determine the need for the Project in light of potential demand for such extravagant residential estates. A range of alternatives, including a no-build option, will inform the public and decision-makers about whether constructing 14 mega-mansions is worth the environmental impacts of this Project.

Other Impacts the Must be Analyzed in the EIR

In addition to those issues raised above, the EIR must also address thoroughly a variety of other related issues. For example, the EIR must fully disclose and analyze the impacts on aesthetics and noise, and discuss alternatives and effective mitigation measures to avoid, reduce, and mitigate these impacts. The EIR must also address the Project impacts on air quality in light of the poor air quality in the Southern California region.

Conclusion

The environmental effects of the proposed Chadwick Estates Specific Plan will potentially impact biological and water resources, air quality and aesthetics, while increasing the impacts associated with wildfire risks. Evaluation of each of these impacts, as well as analysis of reasonable and prudent alternatives must be included in the EIR. Thank you for the opportunity to submit comments on this proposed Project. Please do not hesitate to contact the Center with any questions at the number listed above. We look forward to reviewing any further environmental documentation on this project.

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,

Ross Middlemiss

Ps Mith

²⁷ CEQA Guidelines, 14 CCR § 15126.6(a).

²⁸ Bradbury Real Estate, viewed 4/29/2020, https://www.redfin.com/city/2048/CA/Bradbury

Staff Attorney Center for Biological Diversity 1212 Broadway Ave. # 800 Oakland, CA 94612

Phone: (510) 844-7115

Email: rmiddlemiss@biologicaldiversity.org

References

- Beier, P., Choate, D., & Barrett, R. H. (1995). Movement patterns of mountain lions during different behaviors. *Journal of Mammalogy*, 76(4), 1056–1070.
- 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.
- Benson, J. F., Mahoney, P. J., Vickers, T. W., Sikich, J. A., Beier, P., Riley, S. P. D., ... Boyce, W. M. (2019). Extinction vortex dynamics of top predators isolated by urbanization. *Ecological Applications*, *0*(0), e01868.
- California Department of Fish and Wildlife, California Natural Diversity Database, Special Animals List (August 2019), available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406
- California Department of Fish and Wildlife, California Natural Diversity Database QuickView Tool, accessed 4-29-2020 Available at: https://apps.wildlife.ca.gov/bios/?tool=cnddbQuick.
- California Department of Fish and Wildlife, Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities, March 20, 2018.
- California Department of Fish and Wildlife, California Natural Diversity Data Base, Online Field Survey Form, https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data
- California Department of Forestry and Fire Protection (CAL FIRE), Incident Information, 2018 Fire Statistics, available at https://www.fire.ca.gov/incidents/2018/.
- California Fish & Game Commission, Notice of Findings, April 21, 2020.
- California Native Plant Society, Botanical Survey Guidelines, https://cnps.org/wp-content/uploads/2018/03/cnps_survey_guidelines.pdf
- Curry, T. (2017) Petition to the U.S. Fish and Wildlife Service to Protect the San Gabriel Chestnut Snail under the Endangered Species Act.
- 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.
- 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).
- Gray, M., Wilmers, C. C., Reed, S. E., & Merenlender, A. M. (2016). Landscape feature-based permeability models relate to puma occurrence. *Landscape and Urban Planning*, 147, 50–58.
- The Guardian, *Last year's wildfires were the most expensive in California history*, available at https://www.theguardian.com/us-news/2019/may/08/california-2018-wildfires-most-expensive
- Gustafson, K. D., Gagne, R. B., Vickers, T. W., Riley, S. P. D., Wilmers, C. C., Bleich, V. C., ... Ernest, H. B. (2018). Genetic source–sink dynamics among naturally structured and anthropogenically fragmented puma populations. *Conservation Genetics*, 20(2), 215–227.
- Jennings, M. (2018). Effects of Wildfire on Wildlife and Connectivity.
- 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.
- Natural History Museum of Los Angeles County, Snails and slugs Living in Metropolitan Environments Data, https://www.inaturalist.org/observations?place_id=any&taxon_id=210624
- Radeloff et al. (2018), *Rapid growth of the US wildland-urban interface raises wildfire risk*. Proceedings of the National Academy of Sciences, www.pnas.org/cgi/doi/10.1073/pnas.1718850115.
- Redfin, Bradbury Real Estate, viewed 4/29/2020, available at: https://www.redfin.com/city/2048/CA/Bradbury.
- 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.
- 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(1802).
- Southern California Public Radio, 'Defensible space' couldn't keep Thomas fire from burning Ventura County. 12/19/17, available at https://www.scpr.org/news/2017/12/19/79035/defensible-space-couldn-t-keep-thomas-fire-from-bu/.
- 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*.
- Syphard, A. D., Keeley, J. E., & Brennan, T. J. (2011). Comparing the role of fuel breaks across southern California national forests. *Forest Ecology and Management*, 261(11), 2038–2048.
- Syphard, A. D., Radeloff, V. C., Hawbaker, T. J., & Stewart, S. I. (2009). Conservation threats due to human-caused increases in fire frequency in mediterranean-climate ecosystems. *Conservation Biology*, 23(3), 758–769.
- Syphard, A. D., Radeloff, V. C., Keeley, J. E., Hawbaker, T. J., Clayton, M. K., Stewart, S. I., ... Hammer, R. B. (2007). Human influence on California fire regimes. *Ecological Society of America*, 17(5), 1388–1402.
- Van Dyke, F. G., Brocke, R. H., Shaw, H. G., Ackerman, B. B., Hemker, T. P., & Lindzey, F. G. (1986). Reactions of mountain lions to logging and human activity. *The Journal of Wildlife Management*, 50(1), 95–102.
- Vickers, T. W., Sanchez, J. N., Johnson, C. K., Morrison, S. A., Botta, R., Smith, T., ... 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
- Vickers, W., Zeller, K., Ernest, H., Gustafson, K., & Boyce, W. (2017). Mountain Lion (Puma concolor) Connectivity in the North San Diego County Multi-Species Conservation Plan Area, and Assessment of Mountain Lion Habitat Use and Connectivity in Northern San Diego and Southern Riverside and Orange Counties, with Special Focu.
- 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.

- Wilmers, C. C., Wang, Y., Nickel, B., Houghtaling, P., Shakeri, Y., Allen, M. L., ... 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., & 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).
- 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.