



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



Via Electronic Mail Only

January 31, 2022

Thuy Hua
Los Angeles County Department of Regional Planning
320 W. Temple St. 13th Floor
Los Angeles, CA 90012
THua@planning.lacounty.gov

Subject: Notice of Preparation of a Draft Programmatic Environmental Impact Report for the Los Angeles County 2045 Climate Action Plan (Draft 2045 CAP), SCH #2021120568, Los Angeles County Department of Regional Planning, Los Angeles County

Dear Ms. Hua:

The California Department of Fish and Wildlife (CDFW) has reviewed a Notice of Preparation (NOP) of Draft Programmatic Environmental Impact Report (PEIR) from the Los Angeles County Department of Regional Planning (DRP) for the Los Angeles County 2045 Climate Action Plan (Draft 2045 CAP) (Project). CDFW appreciates the opportunity to provide comments regarding aspects of the Project that could affect fish and wildlife resources and be subject to CDFW's regulatory authority under the Fish and Game Code.

CDFW's Role

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

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 *et seq.*). Likewise, to the extent implementation of the Project as proposed may result in "take", as defined by State law, of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 *et seq.*), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & G. Code, § 1900 *et seq.*), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

Conserving California's Wildlife Since 1870

Thuy Hua
 Los Angeles County Department of Regional Planning
 January 31, 2022
 Page 2 of 18

Project Description and Summary

Objective: The Project proposes a General Plan Amendment to replace the Los Angeles County (County) Community Climate Action Plan with the Draft 2045 CAP. The Draft 2045 CAP would be a policy document intended to reduce unincorporated County-wide greenhouse gas (GHG) emissions. The Draft 2045 CAP would demonstrate how local actions can support goals to reduce GHG emissions and ensure that the County's reduction of GHG emissions aligns with State goals to reduce GHG emissions and the Our County Sustainability Plan.

The Draft 2045 CAP would be modeled with the land use assumptions, policies and implementation programs found within the General Plan (including the current 6th Cycle 2021-2029 Housing Element), as well as within other County projects and programs. The Draft 2045 CAP would include an updated GHG emissions inventory for 2018; new emissions forecasts for 2030, 2035, and 2045; new GHG emissions targets for 2030, 2035, and 2045; a revised suite of GHG reduction strategies, measures, and actions; a technical modeling appendix to explain the Draft 2045 CAP's GHG reduction estimates; a consideration of environmental justice and equity concerns; and a new development review consistency checklist to allow projects to streamline CEQA compliance by using the Draft 2045 CAP (CEQA Guidelines, § 15183.5). The Draft 2045 CAP is anticipated to include approximately 26 recommended GHG reduction measures. The recommended GHG reduction measures are to be organized under five main categories and 11 strategies listed below.

- 1) Climate Leadership
 - Strategy 1: Lead by example towards carbon neutrality
- 2) Transportation
 - Strategy 2: Increase densities and diversity of destinations with an emphasis near transit
 - Strategy 3: Reduce single-occupancy vehicle trips
 - Strategy 4: Institutionalize low-carbon transportation
- 3) Building Energy & Water
 - Strategy 5: Decarbonize buildings and energy use
 - Strategy 6: Increase generation and resilience of renewable energy
 - Strategy 7: Improve efficiency of building energy use
 - Strategy 8: Promote water conservation
- 4) Waste
 - Strategy 9: Reduce and divert waste
- 5) Agriculture, Forestry, and Other Land Use
 - Strategy 10: Conserve Forests and Working Lands
 - Strategy 11: Promote Carbon Sequestration and Sustainable Agriculture

Individual projects implementing Draft 2045 CAP measures are anticipated to be located primarily within the urban environments and on disturbed areas with existing infrastructure. These include a majority of the Draft 2045 CAP measures promoting transportation option, institutionalizing low-carbon transportation, promoting water conservation, and increasing renewable energy. However, some of the Draft 2045 CAP measures would promote implementation projects including transit routes, electric vehicle chargers, water recycling systems, solar energy generation facilities, and waste management facilities. Depending on the

Thuy Hua
 Los Angeles County Department of Regional Planning
 January 31, 2022
 Page 3 of 18

location of the implementing projects, construction could result in impacts on biological resources.

Location: Implementation of the Project would occur throughout unincorporated Los Angeles County in all General Plan, Community Plan, Area Plan, and zoning designations.

Comments and Recommendations

CDFW offers the comments and recommendations below to assist DRP in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. The PEIR should provide adequate and complete disclosure of the Project's potential impacts on biological resources [Pub. Resources Code, § 21061; CEQA Guidelines, §§ 15003(i), 15151]. CDFW looks forward to commenting on the PEIR when it is available.

Specific Comments

- 1) Biological Resources Assessment for Individual Projects. CDFW recommends the PEIR include a requirement where projects implementing Draft 2045 CAP measures provide a biological resources assessment (see General Comment #3). A biological resources assessment should include a discussion of a project's potential impact on biological resources including, but not limited to, biological resources discussed in Comments #2 through 9 below. Based on the results of the biological resources assessment, a qualified biologist should prepare species- and site-specific measures to avoid, minimize, and/or mitigate for a project's potentially significant impacts on biological resources.
- 2) Biological Resources in the Antelope Valley. The Project could potentially result in installation of new solar energy generation facilities on County-owned land. Siting, construction, decommissioning, and operational activities associated with solar array installations, as well as transmission facilities, result in loss of native vegetation and habitat for wildlife (ICF 2019). CDFW is concerned that new solar energy generation facilities installed in the Antelope Valley region could result in significant habitat loss and impact special status, rare, and sensitive species of plants and wildlife, including (but not limited to) the following: Swainson's hawk (*Buteo swainsonii*), Mohave ground squirrel (*Xerospermophilus mohavensis*), desert tortoise (*Gopherus agassizii*), burrowing owl (*Athene cunicularia*), western Joshua tree (*Yucca brevifolia*), and alkali mariposa lily (*Calochortus striatus*).
 - a) Analysis and Disclosure. As part of the PEIR's evaluation of the Project's impact on biological resources, CDFW recommends the PEIR provide a focused discussion on the Project's potential impact on biological resources in the Antelope Valley. At a minimum, the PEIR should discuss the Project's impact on focal species identified on Table 2-2 in the CDFW-approved final [Antelope Valley Regional Conservation Investment Strategy](#) (AVRCIS) (ICF 2019). The PEIR should also discuss the Project's impact on other conservation elements identified in the AVRCIS, which includes habitat connectivity, farmlands, rangelands, and natural communities.
 - b) Mitigation. CDFW recommends the PEIR include measures that require individual projects to mitigate for impacts on special status, rare, and sensitive species of plants

Thuy Hua
 Los Angeles County Department of Regional Planning
 January 31, 2022
 Page 4 of 18

and wildlife and natural communities in the AVRCIS area. Mitigation measures should be consistent with conservation strategies identified in the AVRCIS. If the DRP proposes in-lieu fees or a form of mitigation payment as mitigation, the PEIR should thoroughly discuss why DRP's proposal is adequate to mitigate for impacts to these biological resources. At a minimum, the PEIR should discuss the following: 1) how the fee/fund is designed to (and will) mitigate the effects at issue at a level meaningful for purposes of CEQA; 2) why the fee/fund is appropriate for mitigating the cumulative loss of habitat; 3) why the fee/fund is sufficient to purchase land or credits at a mitigation bank; 4) where land may be acquired or where credits may be purchased; 5) when fee/fund would occur/be used; and, 6) why the fee/fund would be adequate such that no impacts would occur/no net loss of habitat. Adequate disclosure is necessary to identify the nexus between the mitigation proposed and the impacts that may occur and allow CDFW to review and provide comments on the adequacy of the mitigation proposed.

- 3) Wildlife Corridors. The Project area may overlap with wildlife corridors and linkages identified in the [South Coast Missing Linkages Project](#) (SCW 2021). Some of these corridors such as the San Gabriel Castaic corridor have experienced some connectivity loss or is threatened due to development and transportation projects. Development including installation of solar energy generation facilities potentially proposed by the Project, especially on undeveloped County-owned land, could introduce new/additional barriers to dispersal and constrain wildlife corridors and pinch points leading to severed migration.
 - a) Analysis and Disclosure: The PEIR should discuss the Project's potential impact and cumulative impact on wildlife corridors. The PEIR should discuss impacts from the standpoint of the following: 1) introducing new/additional barriers to dispersal; 2) constraining wildlife corridors and pinch points leading to severed migration; 3) habitat loss, fragmentation, and encroachment; and 4) increased human presence, noise, and lighting.
 - b) Avoidance. The PEIR should include a measure whereby individual projects should first avoid impacts wildlife corridors through planning efforts to locate projects outside of wildlife corridors.
 - c) Mitigation. If avoidance is not feasible, CDFW recommends the PEIR include measures that require individual projects to provide compensatory mitigation for impacts on wildlife corridors. If the DRP proposes in-lieu fees or a form of mitigation payment as mitigation, the PEIR should thoroughly discuss why DRP's proposal is adequate to mitigate for impacts to these biological resources (see Comment #2b).
- 4) Impact on Mountain Lion (*Puma concolor*). Mountain lion occurs in the Project area. Installation of solar energy generation facilities potentially proposed by the Project, especially on undeveloped County-owned land, could impact mountain lion through habitat loss and fragmentation, as well as introduce new/additional barriers to mountain lion dispersal.
 - a) Protection Status: The mountain lion is a specially protected mammal in the State (Fish and G. Code, § 4800). In addition, on April 21, 2020, the California Fish and Game Commission accepted a petition to list the Southern California/Central Coast Evolutionary Significant Unit of mountain lion as threatened under CESA (CDFW 2020).

Thuy Hua
Los Angeles County Department of Regional Planning
January 31, 2022
Page 5 of 18

As a CESA candidate species, the mountain lion in southern California is granted full protection of a threatened species under CESA.

- b) Analysis and Disclosure. The PEIR should discuss the Project's potential impact on mountain lion. The PEIR should discuss impacts from the standpoint of the following: 1) introducing new/additional barriers to dispersal; 2) constraining wildlife corridors and pinch points leading to severed migration; 3) habitat loss, fragmentation, and encroachment; and 4) increased human presence, noise, and lighting.
- c) Individual Project-Level Impact Assessment. CDFW recommends the PEIR include a measure that requires individual projects to evaluate impacts on mountain lion. Individual project-level evaluations should be supported by an analysis on mountain lion movement, territory size, and habitat use within and surrounding the project vicinity. CDFW recommends using wildlife cameras to aid in identification of areas that may be important to mountain lion movement.
- d) Avoidance and Mitigation. CDFW recommends avoidance and mitigation consistent with Comment #3b and 3c.
- e) Use of Rodenticides. CDFW recommends DRP prohibit all subsequent projects implementing Draft 2045 CAP measures from using any second generation anticoagulant rodenticides. Second generation anticoagulant rodenticides are known to have harmful effects on the ecosystem and wildlife. Assembly Bill 1788 prohibits the use of any second generation anticoagulant rodenticides because second generation anticoagulant rodenticides have a higher toxicity and are more dangerous to nontarget wildlife such as mountain lions, bobcats, foxes, and coyotes (California Legislative Information 2020).
- f) CESA. CDFW considers adverse impacts to a species protected by CESA to be significant without mitigation under CEQA. As to CESA, take of any endangered, threatened, candidate species, or CESA-listed plant species that results from a project is prohibited, except as authorized by State law (Fish & G. Code, §§ 2080, 2085; Cal. Code Regs., tit. 14, §786.9). Consequently, if a project and any project-related activity during the life of a project will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, CDFW recommends that the project proponent seek appropriate take authorization under CESA prior to implementing the project. Appropriate authorization from CDFW may include an Incidental Take Permit (ITP) or a Consistency Determination in certain circumstances, among other options [Fish & Game Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to the project and mitigation measures may be required to obtain an ITP. Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an ITP unless the project's CEQA document addresses all project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of an ITP. For these reasons, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for an ITP.

Thuy Hua
Los Angeles County Department of Regional Planning
January 31, 2022
Page 6 of 18

- 5) Woodlands. The Project area (unincorporated Los Angeles County) encompasses native woodlands that include (but are not limited to) California walnut groves (*Juglans californica* Woodland Alliance); oak woodlands (*Quercus* genus Woodland Alliance); California bay forest (*Umbellularia californica* Forest Alliance); California sycamore woodlands (*Platanus racemosa* Woodland Alliance); Fremont cottonwood forest (*Populus fremontii* Forest Alliance); and willow thickets (*Salix* Shrubland or Woodland Alliance).
- a) Sensitive Natural Communities. Natural communities, alliances, and associations with a State-wide rarity ranking of S1, S2, and S3 should be considered sensitive and declining at the local and regional level (see General Comment #3a). CDFW considers sensitive natural communities as threatened habitats having both regional and local significance.
- i. California walnut groves is a sensitive natural community with a rarity ranking of S3.2 (CDFW 2022a; Sawyer et al. 2009). California walnut groves are only found in southern California where this natural community has been significantly reduced due to urban development, type conversion, and agriculture.
 - ii. Some oak woodland alliances have a rarity ranking of S1, S2, or S3. While the coast live oak (*Quercus agrifolia* Woodland Alliance) has a rarity ranking of S4, some associations are rare (S1, S2, or S3) (Sawyer et al. 2009). Oak woodlands serve several important ecological functions such as protecting soils from erosion and land sliding, regulating water flow in watersheds, and maintaining water quality in streams and rivers. Oak woodlands also have higher levels of biodiversity than any other terrestrial ecosystem in California. Over 330 species of birds, mammals, reptiles, and amphibians depend on oak woodlands in California at some stage in their life cycle (CalPIF 2002). Moreover, oak woodlands are protected by the Oak Woodlands Conservation Act (pursuant under Fish and Game Code sections 1360-1372) and Public Resources Code section 21083.4 due to the historic and on-going loss of these resources. The percentage of oak woodlands that are developed in southern California is higher than in any other part of the State (Gaman and Firman 2006).
- b) Analysis and Disclosure. The PEIR should discuss the Project's potential impact on Sensitive Natural Communities occurring within the Project area. Natural community names should be provided in accordance with the [Manual of California Vegetation](#) (MCV), second edition (Sawyer et al. 2009).
- c) Avoidance. CDFW recommends the PEIR include measures that require individual projects to avoid impacts on sensitive natural communities. Mitigation may include avoiding impacts by establishing effective setbacks. If the DRP proposes buffers/setbacks as mitigation for all subsequent individual projects, the PEIR should provide justification for the effectiveness of chosen buffer/setback distances to avoid impacts on sensitive natural communities. An appropriate buffer/setback should avoid direct and indirect impacts on sensitive natural communities, allow for population connectivity and expansion, and protect processes supporting sensitive natural communities such as hydrological processes in the case of California walnut groves.
- d) Compensatory Mitigation. If avoidance is not feasible, the PEIR should require individual projects to provide compensatory mitigation for impacts on sensitive natural communities at no less than 2:1. DRP should require higher mitigation for project-level impacts on S1

Thuy Hua
 Los Angeles County Department of Regional Planning
 January 31, 2022
 Page 7 of 18

and S2-ranked natural communities and natural communities that are locally rare. Impacts due to fuel modification or trimming should also be mitigated as these impacts would result in permanent loss and perpetual impacts on habitat function and quality. There should be no-net loss of individual trees and habitat acres for California walnut groves and oak woodland. Mitigation should be provided for both individual trees and habitat acres. The replacement of individual trees is inadequate to mitigate for the loss of habitat.

- 6) Stream Delineation and Impact Assessment. The Project area (unincorporated Los Angeles County) encompasses many watersheds, rivers, waterbodies, and tributaries including (but not limited to) the Los Angeles River watershed, Northern Mojave River watershed, Ventura–San Gabriel Coastal watershed, Los Angeles River, Santa Clara River, San Gabriel River, Tujunga Creek, Castaic Creek, and desert dry washes in the Antelope Valley region.
- a) Fish and Game Code section 1600 et. seq. CDFW exercises its regulatory authority as provided by Fish and Game Code section 1600 et seq. to conserve fish and wildlife resources which includes rivers, streams, or lakes and associated natural communities.
 - b) Analysis and Disclosure. The PEIR should discuss the Project's potential impact on rivers, streams, or lakes¹ and associated natural communities. Impacts may include (but not limited to) the following: channelizing or diverting a stream; impairing a watercourse; Project-related activities causing erosion; removing vegetation adjacent to a water course; and degrading vegetation through habitat modification (e.g., loss of water source, encroachment, and edge effects leading to introduction of non-native plants). CDFW recommends the PEIR include a fine-scale stream delineation within the Project area to the extent feasible as part of the PEIR's evaluation of the Project's impact on rivers, streams, or lakes and a list of associated natural communities. Natural community names should be provided in accordance with the MCV, second edition (Sawyer et al. 2009).
 - c) Individual Project-Level Impact Assessment. CDFW recommends the PEIR include a measure that require individual projects to provide a stream delineation and evaluate impacts on any river, stream, or lake and associated natural communities. The delineation should be conducted pursuant to the U.S Fish and Wildlife Service's (USFWS) wetland definition adopted by CDFW (Cowardin et al. 1979). Be advised that some wetland and riparian habitats subject to CDFW's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers' Section 404 permit and Regional Water Quality Control Board Section 401 Certification.
 - d) Mitigation. CDFW recommends the PEIR include measures that require individual projects to mitigate for impacts on streams and associated natural communities. Mitigation may include avoiding impacts by establishing effective unobstructed vegetated buffers and setbacks adjoining streams and associated natural communities. If the DRP proposes buffers and setbacks as mitigation for all subsequent individual projects, the

¹ "Any river, stream, or lake" includes those that are dry for periods of time (ephemeral/episodic) as well as those that flow year-round (perennial). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a water body.

Thuy Hua
 Los Angeles County Department of Regional Planning
 January 31, 2022
 Page 8 of 18

PEIR should provide justification for the effectiveness of chosen buffer and setback distances to avoid impacts on the stream and associated natural communities. If avoidance is not feasible, the PEIR should require individual projects to provide compensatory mitigation for impacts on streams and associated natural communities at no less than 2:1. DRP should require higher mitigation for project-level impacts on sensitive natural communities (see General Comment #3a) and presence of rare, sensitive, or special status flora and fauna.

- e) Lake and Streambed Alteration (LSA) Agreement. As a Responsible Agency under CEQA, CDFW has authority over activities in streams and/or lakes that will divert or obstruct the natural flow, or change the bed, channel, or bank (including vegetation associated with the stream or lake) of a river or stream or use material from a streambed. For any such activities, CDFW recommends the PEIR include a measure that requires individual projects to notify CDFW pursuant to Fish and Game Code section 1602. CDFW should be notified prior to starting activities that may impact streams, and the project should obtain an LSA Agreement² prior to starting project activities. Please visit CDFW's [Lake and Streambed Alteration Program](#) webpage for more information (CDFW 2022b).
- 7) Water Recycling Systems. Some of the Draft 2045 CAP measures would promote implementation projects including water recycling systems. Water recycling systems that would capture and infiltrate local dry and wet season runoff would divert water from local watercourses. A reduction in dry and wet season flow could impact biological resources depending on the flow. Impacts on biological resources could occur in the immediate project area and downstream from the project area.
- a) Analysis and Disclosure. The PEIR should discuss the Project's potential impact of water recycling systems on watercourses and biological resources. The PEIR should provide information on the type(s) of water recycling systems that would be installed; where water recycling systems would be located in relation to rivers, streams, and lakes in the Project area; the approximate volume of water that would be captured and diverted resulting from the Project; and what biological resources could be impacted by water recycling systems.
- b) Individual Project-Level Impact Assessment. CDFW recommends the PEIR include a measure that requires individual projects resulting in water recycling systems to provide an analysis of impacts on flow and evaluate changes in flow and hydraulics on biological resources. An adequate analysis should provide the following information at a minimum: 1) an adequate study reach in order to analyze changes in flow in the immediate project area and downstream; 2) flow and hydraulics (e.g., water depth, wetted perimeter, and velocity) during the wet season (November through March), dry season (April through October), and both above-average and below-average water year (i.e., wet

² CDFW's issuance of a LSA Agreement for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the environmental document of the local jurisdiction (lead agency) for the project. To minimize additional requirements by CDFW pursuant to section 1600 et seq. and/or under CEQA, the environmental document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement.

Thuy Hua
 Los Angeles County Department of Regional Planning
 January 31, 2022
 Page 9 of 18

season/above-average water year, wet season/below-average water year, dry season/above-average water year, and dry season/below-average water year) under pre-project (i.e., baseline conditions) and post-project conditions; 3) percent changes in flow, water depth, wetted perimeter (acres gained/lost), and velocity (percent change) under project condition; 4) a list of sensitive and special status plant and wildlife species, including natural communities that could be impacted; and 5) project-related impacts on biological resources in relation to cumulative flow reductions. CDFW recommends such analysis and evaluation apply a [function flows approach](#) to evaluate impacts on biological resources. The functional flows approach provides the basis for guidance provided in the [California Environmental Flows Framework](#) (UC Davis 2022). Functional flows are distinct aspects of a natural flow regime that sustain ecological, geomorphic, or biogeochemical functions, and that support the specific life history and habitat needs of native aquatic species. Retaining key functional flow components in managed flow regimes is thus expected to support foundational physical and ecological processes that sustain biological communities

- c) Mitigation. CDFW recommends the PEIR include measures that require individual projects to mitigate for impacts on biological resources resulting from water recycling systems. Mitigation may include notifying CDFW and obtaining an LSA Agreement pursuant to Fish and Game Code section 1602 (see Comment #6).
- 8) Nesting Birds. Individual projects implementing Draft 2045 CAP measures that would require vegetation removal and/or disturbance could impact nesting birds. Construction could create elevated levels of noise, human activity, dust, ground vibrations, and vegetation disturbance. These activities occurring near potential nests could cause birds to abandon their nests and a decrease in feeding frequency, both resulting in the loss of fertile eggs or nestlings.
- a) Protection Status. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (Code of Federal Regulations, Title 50, § 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the MBTA). It is unlawful to take, possess, or needlessly destroy the nest or eggs of any raptor.
- b) Analysis and Disclosure. The PEIR should discuss the Project's potential impact on nesting birds and raptors. A discussion of potential impacts should include impacts that could occur during construction, ground-disturbing activities (e.g., mobilizing, staging, drilling, and excavating), and vegetation removal associated with implementation of individual projects.
- c) Avoidance. CDFW recommends that the PEIR include measures that require individual projects to fully avoid impacts on nesting birds and raptors. To the extent feasible, no construction, ground-disturbing activities (e.g., mobilizing, staging, drilling, and excavating), and vegetation removal should occur during the avian breeding season which generally runs from February 15 through September 15 (as early as January 1 for some raptors) to avoid take of birds, raptors, or their eggs.
- d) Minimizing Potential Impacts. If impacts on nesting birds and raptors cannot be avoided, CDFW recommends the PEIR include measures that require individual projects to

Thuy Hua
Los Angeles County Department of Regional Planning
January 31, 2022
Page 10 of 18

minimize impacts on nesting birds and raptors during implementation of individual projects. Prior to starting ground-disturbing activities and vegetation removal, CDFW recommends a qualified biologist conduct nesting bird and raptor surveys to identify nests. The qualified biologist should establish no-disturbance buffers to minimize impacts on those nests. CDFW recommends a minimum 300-foot no-disturbance buffer around active bird nests. For raptors, the no-disturbance buffer should be expanded to 500 feet and 0.5 mile for special status species, if feasible. Personnel working on a project, including all contractors working on site, should be instructed on the presence of nesting birds, area sensitivity, and adherence to no-disturbance buffers. Reductions in the buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors determined by a qualified biologist.

- 9) Bats. Numerous bat species are known to roost in trees and structures throughout Los Angeles County. Individual projects implementing Draft 2045 CAP measures that would require removal and/or disturbance of vegetation and other potential roosting structures could impact bats. Removal of trees, vegetation, and/or structures supporting roosting bats could result in injury and/or mortality of bats, as well as loss of roosting habitat. Bats and roosts could also be impacted by increased noise, human activity, dust, and ground vibrations during construction and ground-disturbing activities.
 - a) Protection Status. Bats are considered non-game mammals and are afforded protection by State law from take and/or harassment (Fish & G. Code, § 4150; Cal. Code of Regs., § 251.1). In addition, some bats are considered California Species of Special Concern (SSC). CEQA provides protection not only for CESA-listed species, but for any species including but not limited to SSC which can be shown to meet the criteria for State listing. These SSC meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Take of SSC could require a mandatory finding of significance (CEQA Guidelines, § 15065).
 - b) Analysis and Disclosure. The PEIR should discuss the Project's potential impact on bats and habitat supporting roosting bats. A discussion of potential impacts should include impacts that may occur during Project construction, ground-disturbing activities (e.g., mobilizing, staging, drilling, and excavating), and vegetation removal.
 - c) Avoidance and Minimization. CDFW recommends that the PEIR include measures that require individual projects to avoid and/or minimize impacts on bats during implementation of individual projects. Prior to project implementation, CDFW recommends that DRP require individual projects to retain a qualified bat specialist to identify potential daytime, nighttime, wintering, and hibernation roost sites within the project site, and conduct bat surveys within these areas (plus a 100-foot buffer as access allows) to identify roosting bats and any maternity roosts. CDFW recommends using acoustic recognition technology to maximize detection of bats. The PEIR should incorporate mitigation measures in accordance with [California Bat Mitigation Measures](#) (Johnston et al. 2004).

Thuy Hua
Los Angeles County Department of Regional Planning
January 31, 2022
Page 11 of 18

General Comments

- 1) Disclosure. The PEIR should provide an adequate, complete, and detailed disclosure about the effect which the proposed Project is likely to have on the environment (Pub. Resources Code, § 20161; CEQA Guidelines, § 15151). Adequate disclosure is necessary so CDFW may provide comments on the adequacy of proposed avoidance, minimization, or mitigation measures, as well as to assess the significance of the specific impact relative to plant and wildlife species impacted (e.g., current range, distribution, population trends, and connectivity).
- 2) Mitigation Measures. Public agencies have a duty under CEQA to prevent significant, avoidable damage to the environment by requiring changes in a project through the use of feasible alternatives or mitigation measures [CEQA Guidelines, §§ 15002(a)(3), 15021]. Pursuant to CEQA Guidelines section 15126.4, an environmental document “shall describe feasible measures which could mitigate for impacts below a significant level under CEQA.”
 - a) Level of Detail. Mitigation measures must be feasible, effective, implemented, and fully enforceable/imposed by the lead agency through permit conditions, agreements, or other legally binding instruments (Pub. Resources Code, § 21081.6(b); CEQA Guidelines, § 15126.4). A public agency “shall provide the measures that are fully enforceable through permit conditions, agreements, or other measures” (Pub. Resources Code, § 21081.6). CDFW recommends DRP provide mitigation measures that are specific, detailed (i.e., responsible party, timing, specific actions, location), and clear in order for a measure to be fully enforceable and implemented successfully via a mitigation monitoring and/or reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097).
 - b) Disclosure of Impacts. If a proposed mitigation measure would cause one or more significant effects, in addition to impacts caused by the proposed Project, the PEIR should include a discussion of the effects of proposed mitigation measures [CEQA Guidelines, § 15126.4(a)(1)]. In that regard, the PEIR should provide an adequate, complete, and detailed disclosure about the Project’s proposed mitigation measure(s). Adequate disclosure is necessary so CDFW may assess the potential impacts of proposed mitigation measures.
- 3) Biological Baseline Assessment. An adequate biological resources assessment should provide a complete assessment and impact analysis of the flora and fauna within and adjacent to the Project area and where the Project may result in ground disturbance. The assessment and analysis should place emphasis on identifying endangered, threatened, rare, and sensitive species; regionally and locally unique species; and sensitive habitats. An impact analysis will aid in determining the Project’s potential direct, indirect, and cumulative biological impacts, as well as specific mitigation or avoidance measures necessary to offset those impacts. CDFW also considers impacts to an SSC a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures. The PEIR should include the following information:
 - a) Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region [CEQA Guidelines, § 15125(c)]. The PEIR should include measures to fully avoid and otherwise

Thuy Hua
Los Angeles County Department of Regional Planning
January 31, 2022
Page 12 of 18

protect Sensitive Natural Communities. CDFW considers Sensitive Natural Communities as threatened habitats having both regional and local significance. Natural communities, alliances, and associations with a State-wide rarity ranking of S1, S2, and S3 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by visiting the [Vegetation Classification and Mapping Program - Natural Communities](#) webpage (CDFW 2022a);

- b) A thorough, recent, floristic-based assessment of special status plants and natural communities following CDFW's [Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities](#) (CDFW 2018). Adjoining habitat areas should be included where the Project's construction and activities could lead to direct or indirect impacts off site;
- c) Floristic alliance- and/or association-based mapping and vegetation impact assessments conducted in the Project area and within adjacent areas. The [Manual of California Vegetation](#), second edition, should also be used to inform this mapping and assessment (Sawyer et al. 2009). Adjoining habitat areas should be included in this assessment where the Project's construction and activities could lead to direct or indirect impacts off site;
- d) A complete and recent assessment of the biological resources associated with each habitat type in the Project area and within adjacent areas. CDFW's [California Natural Diversity Database](#) in Sacramento should be contacted to obtain current information on any previously reported sensitive species and habitat (CDFW 2022c). An assessment should include a minimum nine-quadrangle search of the CNDDDB to determine a list of species potentially present in the Project area. A lack of records in the CNDDDB does not mean that rare, threatened, or endangered plants and wildlife do not occur. Field verification for the presence or absence of sensitive species is necessary to provide a complete biological assessment for adequate CEQA review [CEQA Guidelines, § 15003(i)];
- e) A complete, recent, assessment of endangered, rare, or threatened species and other sensitive species within the Project area and adjacent areas, including SSC and California Fully Protected Species (Fish & G. Code, §§ 3511, 4700, 5050, and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Seasonal variations in use of the Project area should also be addressed such as wintering, roosting, nesting, and foraging habitat. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, may be required if suitable habitat is present. See CDFW's [Survey and Monitoring Protocols and Guidelines](#) for established survey protocol for select species (CDFW 2022d). Acceptable species-specific survey procedures may be developed in consultation with CDFW and USFWS; and,
- f) A recent wildlife and rare plant survey. CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if Project implementation build out could occur over a protracted time frame

Thuy Hua
Los Angeles County Department of Regional Planning
January 31, 2022
Page 13 of 18

or in phases.

- 4) Biological Direct, Indirect, and Cumulative Impacts. The PEIR should provide a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources with specific measures to offset such impacts. The PEIR should address the following:
 - a) A discussion regarding Project-related indirect impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands [e.g., preserve lands associated with a Natural Community Conservation Plan (Fish & G. Code, § 2800 et. seq.)]. Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in areas adjacent to the Project, should be fully analyzed and discussed in the PEIR;
 - b) A discussion of both the short-term and long-term effects of the Project on species population distribution and concentration, as well as alterations of the ecosystem supporting those species impacted [CEQA Guidelines, § 15126.2(a)];
 - c) A discussion of potential adverse impacts from lighting, noise, temporary and permanent human activity, and exotic species, and identification of any mitigation measures;
 - d) A discussion of post-Project fate of drainage patterns, surface flows, and soil erosion and/or sedimentation in streams and water bodies. The discussion should also address the potential water extraction activities and the potential resulting impacts on habitat (if any) supported by the groundwater. Measures to mitigate such impacts should be included;
 - e) An analysis of impacts from proposed changes to land use designations and zoning, and existing land use designation and zoning located nearby or adjacent to natural areas that may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the PEIR; and,
 - f) A cumulative effects analysis as described under CEQA Guidelines section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant and wildlife species, habitat, and natural communities. If DRP determines that the Project would not have a cumulative impact, the PEIR should indicate why the cumulative impact is not significant. DRP's determination should be supported by facts and analyses [CEQA Guidelines, § 15130(a)(2)].
- 5) Project Description and Alternatives. To enable adequate review and comment on the proposed Project from the standpoint of the protection of fish, wildlife, and plants, CDFW recommends the following information be included in the PEIR:
 - a) A complete discussion of the purpose and need for, and description of the proposed Project;

Thuy Hua
 Los Angeles County Department of Regional Planning
 January 31, 2022
 Page 14 of 18

- b) Pursuant to CEQA Guidelines section 15126.6(a), an environmental document “shall describe a reasonable range of potentially feasible alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project.” CEQA Guidelines section 15126.6(f)(2) states if the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion; and,
- c) A range of feasible alternatives to the Project location to avoid or otherwise minimize direct and indirect impacts on sensitive biological resources and wildlife movement areas. CDFW recommends DRP select Project designs and alternatives that would avoid or otherwise minimize direct and indirect impacts on biological resources. CDFW also recommends DRP consider establishing appropriate setbacks from sensitive and special status biological resources. Setbacks should not be impacted by ground disturbance or hydrological changes from any future Project-related construction, activities, maintenance, and development. As a general rule, CDFW recommends reducing or clustering a development footprint to retain unobstructed spaces for vegetation and wildlife and provide connections for wildlife between properties and minimize obstacles to open space.

Project alternatives should be thoroughly evaluated, even if an alternative would impede, to some degree, the attainment of the Project objectives or would be more costly (CEQA Guidelines, § 15126.6). The PEIR “shall” include sufficient information about each alternative to allow meaningful evaluation, public participation, analysis, and comparison with the proposed Project (CEQA Guidelines, § 15126.6).

- d) Where the Project may impact aquatic and riparian resources, CDFW recommends DRP select Project designs and alternatives that would fully avoid impacts to such resources. CDFW also recommends an alternative that would not impede, alter, or otherwise modify existing surface flow, watercourse and meander, and water-dependent ecosystems and natural communities. Project designs should consider elevated crossings to avoid channelizing or narrowing of watercourses. Any modifications to a river, creek, or stream may cause or magnify upstream bank erosion, channel incision, and drop in water level and cause the watercourse to alter its course of flow.
- 6) Data. CEQA requires that information developed in environmental impact reports be incorporated into a database which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Accordingly, please report any special status species and natural communities detected by completing and submitting [CNDDDB Field Survey Forms](#) (CDFW 2022e). To submit information on special status native plant populations and sensitive natural communities, the [Combined Rapid Assessment and Releve Form](#) should be completed and submitted to CDFW’s Vegetation Classification and Mapping Program (CDFW 2022f). DRP should ensure data collected for the preparation of the PEIR be properly submitted, with all data fields applicable filled out.
 - 7) Use of Native Plants and Trees. CDFW supports the use of native plants for any project proposing revegetation and landscaping. CDFW strongly recommends avoiding non-native, invasive plants for landscaping and restoration, particularly any species listed as ‘Moderate’

Thuy Hua
Los Angeles County Department of Regional Planning
January 31, 2022
Page 15 of 18

or 'High' by the [California Invasive Plant Council](#) (Cal-IPC 2022). CDFW supports the use of native species found in naturally occurring plant communities within or adjacent to the Project area. In addition, CDFW supports planting species of trees, such as oaks (*Quercus* genus), and understory vegetation (e.g., ground cover, subshrubs, and shrubs) that create habitat and provide a food source for birds. CDFW recommends retaining any standing, dead, or dying tree (snags) where possible because snags provide perching and nesting habitat for birds and raptors. Finally, CDFW supports planting species of vegetation with high insect and pollinator value.

- 8) Translocation/Salvage of Plants and Animal Species. Translocation and transplantation is the process of removing plants and wildlife from one location and permanently moving it to a new location. CDFW generally does not support the use of translocation or transplantation as the primary mitigation strategy for unavoidable impacts to endangered, rare, or threatened plants and animals. Studies have shown that these efforts are experimental and the outcome unreliable. CDFW has found that permanent preservation and management of habitat capable of supporting these species is often a more effective long-term strategy for conserving plants and animals and their habitats.
- 9) Compensatory Mitigation. The PEIR should include compensatory mitigation measures for the Project's significant direct and indirect impacts to sensitive and special status plants, animals, and habitats. Mitigation measures should emphasize avoidance and minimization of Project-related impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible or would not be biologically viable and therefore inadequate to mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. Areas proposed as mitigation lands should be protected in perpetuity with a conservation easement and financial assurance and dedicated to a qualified entity for long-term management and monitoring. Under Government Code, section 65967, the Lead Agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves.
- 10) Long-term Management of Mitigation Lands. For proposed preservation and/or restoration, the PEIR should include measures to protect the targeted habitat values from direct and indirect negative impacts in perpetuity. The objective should be to offset Project-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include (but are not limited to) restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, and increased human intrusion. An appropriate non-wasting endowment should be set aside to provide for long-term management of mitigation lands.
- 11) Wetland Resources. CDFW, as described in Fish and Game Code section 703(a), is guided by the Fish and Game Commission's (Commission) policies. The [Wetlands Resources](#) policy the Commission "...seek[s] to provide for the protection, preservation, restoration, enhancement and expansion of wetland habitat in California" (CFGC 2020). Further, it is the policy of the Fish and Game Commission to strongly discourage development in or conversion of wetlands. It opposes, consistent with its legal authority, any development or conversion that would result in a reduction of wetland acreage or wetland habitat values. To that end, the Commission opposes wetland development proposals unless, at a minimum,

Thuy Hua
Los Angeles County Department of Regional Planning
January 31, 2022
Page 16 of 18

project mitigation assures there will be ‘no net loss’ of either wetland habitat values or acreage. The Commission strongly prefers mitigation which would achieve expansion of wetland acreage and enhancement of wetland habitat values.”

- a) The Wetlands Resources policy provides a framework for maintaining wetland resources and establishes mitigation guidance. CDFW encourages avoidance of wetland resources as a primary mitigation measure and discourages the development or type conversion of wetlands to uplands. CDFW encourages activities that would avoid the reduction of wetland acreage, function, or habitat values. Once avoidance and minimization measures have been exhausted, a project should include mitigation measures to assure a “no net loss” of either wetland habitat values, or acreage, for unavoidable impacts to wetland resources. Conversions include, but are not limited to, conversion to subsurface drains, placement of fill or building of structures within the wetland, and channelization or removal of materials from the streambed. All wetlands and watercourses, whether ephemeral, intermittent, or perennial, should be retained and provided with substantial setbacks, which preserve the riparian and aquatic values and functions benefiting local and transient wildlife populations. CDFW recommends mitigation measures to compensate for unavoidable impacts be included in the PEIR and these measures should compensate for the loss of function and value.
- b) The Fish and Game Commission’s Water policy guides CDFW on the quantity and quality of the waters of this State that should be apportioned and maintained respectively so as to produce and sustain maximum numbers of fish and wildlife; to provide maximum protection and enhancement of fish and wildlife and their habitat; encourage and support programs to maintain or restore a high quality of the waters of this State; prevent the degradation thereof caused by pollution and contamination; and, endeavor to keep as much water as possible open and accessible to the public for the use and enjoyment of fish and wildlife. CDFW recommends avoidance of water practices and structures that use excessive amounts of water, and minimization of impacts that negatively affect water quality, to the extent feasible (Fish & G. Code, § 5650).

Conclusion

We appreciate the opportunity to comment on the NOP for the Los Angeles County 2045 Climate Action Plan to assist the Los Angeles County Department of Regional Planning in preparing the Project’s environmental document and identifying and mitigating the Project’s potential impacts on biological resources. If you have any questions or comments regarding this letter, please contact Ruby Kwan-Davis, Senior Environmental Scientist (Specialist), at Ruby.Kwan-Davis@wildlife.ca.gov or (562) 619-2230.

Sincerely,

DocuSigned by:

B6E58CFE24724F5...

Erinn Wilson-Olgin
Environmental Program Manager I
South Coast Region

Thuy Hua
Los Angeles County Department of Regional Planning
January 31, 2022
Page 17 of 18

ec: CDFW

Erinn Wilson-Olgin, Los Alamitos – Erinn.Wilson-Olgin@wildlife.ca.gov
Victoria Tang, Los Alamitos – Victoria.Tang@wildlife.ca.gov
Ruby Kwan-Davis, Los Alamitos – Ruby.Kwan-Davis@wildlife.ca.gov
Felicia Silva, Los Alamitos – Felicia.Silva@wildlife.ca.gov
Julisa Portugal, Los Alamitos – Julisa.Portugal@wildlife.ca.gov
Frederic (Fritz) Rieman, Los Alamitos – Frederic.Rieman@wildlife.ca.gov
Eric Wilkins, San Luis Obispo – Eric.Wilkins@wildlife.ca.gov
Loni Adams, San Diego – Loni.Adams@wildlife.ca.gov
Cindy Hailey, San Diego – Cindy.Hailey@wildlife.ca.gov
CEQA Program Coordinator, Sacramento – CEQACommentLetters@wildlife.ca.gov
State Clearinghouse, Office of Planning and Research – State.Clearinghouse@opr.ca.gov
Los Angeles County Department of Regional Planning – Climate@planning.lacounty.gov

References:

- [CDFWa] California Department of Fish and Wildlife. 2022. Natural Communities. Available from: <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities>.
- [CDFWb] California Department of Fish and Wildlife. 2022. Lake and Streambed Alteration Program. Available from: <https://wildlife.ca.gov/Conservation/LSA>.
- [CDFWc] California Department of Fish and Wildlife. 2022. California Natural Diversity Database. Available from: <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data#43018408-cnddb-in-bios>
- [CDFWd] California Department of Fish and Wildlife. 2021. Survey and Monitoring Protocols and Guidelines. Available from: <https://wildlife.ca.gov/conservation/survey-protocols>
- [CDFWe] California Department of Fish and Wildlife. 2022. Submitting Data to the CNDDDB. Available from: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>
- [CDFWf] California Department of Fish and Wildlife. 2022. Natural Communities — Submitting Information. Available from: <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Submit>
- [CFGc] California Fish and Game Commission. 2020. Policies. Retention of Wetland Acreage and Habitat Values. Accessed: <https://fgc.ca.gov/About/Policies/Miscellaneous>.
- [CDFW] California Department of Fish and Wildlife. 2020. Notice of Findings - Mountain Lion ESU declared a candidate species. Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=178623&inline>
- [CDFW] California Department of Fish and Wildlife. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959>
- [Cal-IPC] California Invasive Plant Council. 2022. The Cal-IPC Inventory. Available from: <https://www.cal-ipc.org/plants/inventory/>
- [CalPIF] California Partners in Flight. 2002. Version 2.0. The oak woodland bird conservation plan: a strategy for protecting and managing oak woodland habitats and associated birds in California (S. Zack, lead author). Point Reyes Bird Observatory, Stinson Beach, CA. Available from: <http://www.prbo.org/calpif/plans.html>
- California Legislative Information. 2020. AB-1788 Pesticides: use of second-generation anticoagulant rodenticides. Available from: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200AB1788

Thuy Hua
Los Angeles County Department of Regional Planning
January 31, 2022
Page 18 of 18

- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Fish and Wildlife Service. FWS/OBS-79/31. Washington, DC.
- Gaman, T. and J. Firman. 2006. Oaks 2040 The Status and Future of Oaks in California. Published by the California Oak Foundation, Oakland, CA. Available from: <https://californiaoaks.org/wp-content/uploads/2016/04/Oaks2040-Final.pdf>
- ICF. 2019. Public Draft Antelope Valley Regional Conservation Investment Strategy. October. (ICF 462.16.) San Diego, California. Prepared for Desert Mountains Conservation Authority, Lancaster, California. Available from: <https://wildlife.ca.gov/Conservation/Planning/Regional-Conservation/Documents>
- Johnston, D., Tatarian, G., & Pierson, E. 2004. California Bat Mitigation Techniques, Solutions, and Effectiveness. Available from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=10334>
- Sawyer, J. O., Keeler-Wolf, T., and Evens J.M. 2009. A Manual of California Vegetation, 2nd ed. ISBN 978-0-943460-49-9.
- [SCW] SC Wildlands. 2021. Projects, South Coast Missing Linkages. Available from: <http://www.scwildlands.org/>
- [UC Davis] University of California, Davis. 2022. The California Environmental Flows Framework. Available from: <https://ceff.ucdavis.edu/>