



State of California – Natural Resources Agency

DEPARTMENT OF FISH AND WILDLIFE

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Governor's Office of Planning & Research

**Apr 28 2021**

## STATE CLEARINGHOUSE

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**Subject: 2020 LA River Master Plan, Draft Program Environmental Impact Report, SCH #2020070128, Los Angeles County Public Works, Los Angeles County**

Dear Ms. Komjakraphan-Tek:

The California Department of Fish and Wildlife (CDFW) has reviewed the Draft Program Environmental Impact Report (PEIR) from the Los Angeles County Public Works (LACPW; Lead Agency) for the 2020 LA River Master Plan (Project). Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own 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.

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## Project Description and Summary

**Background:** In the 1930s, the U.S. Army Corps of Engineers and Los Angeles County Flood Control District channelized the Los Angeles River (LA River) and replaced the shifting floodplain to protect lives and property from flooding. As a result, the LA River evolved from an uncontrolled and meandering river to a major flood management system. The historic floodplain of the LA River is almost entirely developed. Most of the LA River within the channel (bank to bank) is concrete lined along its sides and bottom. However, the LA River is “soft-bottom” (earthen channel) at the Estuary, Sepulveda Basin, and Glendale Narrows. Other areas of the LA River have concrete walls forming a rectangular channel, often called a box channel, or a trapezoidal channel formed by levees.

**Objective:** The proposed Project is along a 51-mile-long, approximately 2-mile-wide corridor (1 mile on each side) of the LA River. The LA River right-of-way is confined to its channel, top of levee, and immediately adjacent “landside” areas. The Project’s nine objectives are to:

- 1) Reduce flood risk and improve resiliency;
- 2) Provide equitable, inclusive, and safe parks, open space, and trails;
- 3) Support healthy connected ecosystems;
- 4) Enhance opportunities for equitable access to the river corridor;
- 5) Embrace and enhance opportunities for arts and culture;
- 6) Address potential adverse impacts on housing affordability and people experiencing homelessness;
- 7) Foster opportunities for continued community engagement, development, and education;
- 8) Improve local water supply reliability; and,
- 9) Promote healthy, safe, clean water.

To meet Project objectives, the Project includes up to 107 potential projects ranging in size from extra-small (less than 1 acre) to extra-large (150+ acres/10+ miles) that would be implemented over the next 25 years. The Project is intended to be a visionary and practical document for 18 local jurisdictions within the Project area. The Project allows for a consistent approach to achieve the nine objectives through implementation of six improvement categories, or kit of parts (KOP) categories. The six KOP categories include:

- 1) KOP Category 1: Trails and Access Gateways. The following design components could be constructed: pedestrian/bike/equestrian trails; equestrian facilities; light towers; water towers; lookouts; boardwalks; channel access points; vehicular access for maintenance and operations; underpasses and overpasses; vegetated buffer; and habitat corridor.
- 2) KOP Category 2: Channel Modifications. The following design components could be constructed: terraced bank; check dams and deployable barriers; levees; armored channels/vertical walls; daylighted storm drains; removed/added concrete; sediment removal; bridge pier modifications; channel texturing/grooving/smoothing; reshape low flow; and installation of access ramps.
- 3) KOP Category 3: Crossings and Platforms. The following design components could be constructed: bridges (pedestrian, bike, equestrian, habitat/wildlife, and multi-use); cantilevers; and platforms.
- 4) KOP Category 4: Diversions. The following design components could be constructed: pumps, diversion pipe/tunnel/channel, overflow weirs, underground gallery, side channel, storm drain interceptors, and wetlands.

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- 5) KOP Category 5: Floodplain Reclamation. Floodplain reclamation in the LA River include wetlands, naturalized banks, braided channels, fields, storage, and side channels.
- 6) KOP Category 6: Off-Channel Land Assets. Off-channel land assets include affordable housing; cultural centers; urban agriculture/composting; water storage; water treatment facilities; dry wells; spreading grounds; purple pipe connections; storm drain daylighting; injection wells; solar panels; fields; and parks. These design elements would occur outside of the LA River right-of-way.

Each of these six KOP categories includes a recommended collection of design components and can be implemented individually or in any combination as subsequent projects, as driven by the local jurisdiction's needs, funding, and policy decisions.

After the Project is approved, individual subsequent projects would be designed and implemented over time by any one of the 18 jurisdictions or others. Individual subsequent projects would tier from the PEIR.

**Location:** The LA River encompasses an 834 square-mile watershed. The LA River flows from its headwaters in the Santa Susana Mountains eastward to the northern area of Griffith Park. Then, the LA River turns southward through the Glendale Narrows before it flows across the coastal plain and into San Pedro Bay near Long Beach where the LA River drains into the Pacific Ocean. The Project spans through 18 jurisdictions (17 cities and unincorporated Los Angeles County areas). Nine distinct geographical sections, or planning frames, related to jurisdictional, hydraulic, and ecological zones have been identified along the LA River and are included in the Project.

## Comments and Recommendations

CDFW offers the comments and recommendations below to assist LACPW in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. CDFW recommends the measures or revisions below be included in a science-based monitoring program that contains adaptive management strategies as part of the Project's CEQA mitigation, monitoring, and reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097).

### Specific Comments

#### Comment #1: Impacts of Recreation on Wildlife

**Issue:** The Project may impact biological resources because of increased visitor uses and recreation.

**Specific impacts:** The Project may cause local extirpation of wildlife from otherwise suitable habitat. Direct impacts on wildlife may include energetic costs to the animal, nest abandonment, reduced reproductive success, and reduced fitness.

**Why impacts would occur:** The Project proposes to create recreational opportunities along the LA River where opportunities do not currently exist. These opportunities include pedestrian/bike/equestrian trails, equestrian facilities, lookouts, boardwalks, channel access points, platform parks, and pavilions. Increased visitor uses and recreation along the LA River

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has potential to impact wildlife and habitat through a variety of ways, including:

- Increased numbers of people and dogs;
- Increased area of influence;
- Increased noise levels;
- Increased trash or pet waste;
- Introduction of unnatural food sources via trash and trash receptacles;
- Loss of habitat due to erosion from non-official footpaths; and,
- Loss of habitat due to introduction or spread of invasive plant species.

**Evidence impacts would be significant:** Recreation and increased human activities can have the following effects on wildlife:

- Non-consumptive recreation can lead to detrimental changes in animal behavior, reproduction, growth, and immune system function (Lucas 2020).
- Human presence can instill strong fear in wild animals, which may adjust their activity to avoid contact with humans. Such risk avoidance can have important nonlethal effects on animal physiology and fitness. This shift may have negative and far-reaching ecological consequences (Gaynor et al. 2018; Mitrovich et al. 2020).
- Human activities that result in escape or avoidance behaviors may increase the probability of a bird being detected by a predator, increase intraspecific aggression in colonial species, expose bird chicks and eggs to adverse environmental conditions that can cause embryo death, and divert energy from feeding or reproduction to defensive behaviors (Hillman et al. 2015).
- Blue tit (*Cyanistes caeruleus*) nestlings near recreation facilities develop slower and fledge with low body mass and poor body condition (Remacha et al. 2016).
- Belding's savannah sparrow (*Passerculus sandwichensis beldingi*) is sensitive to pedestrian and vehicle traffic. An approaching distance of 3 meters and 2.8 meters during the pre-nesting and nesting season, respectively, alert Belding's savannah sparrows to take flight (Fernandez-Juricic et al. 2009).
- Being approached by a person may trigger a change in the behavior or physiological processes in a bird (e.g., flight responses or increased heart rate). Although these responses tend to be short in duration, they can have longer term effects as is the case of breeding birds being flushed from nests leaving eggs or chicks vulnerable to predation (Steven et al. 2011).
- Relatively 'low' impact activities such as walking or hiking can still have negative effects on birds (Steven et al. 2011).
- Increased noise may alter or mask the auditory signals required for information exchange in birds (Hillman et al. 2015).
- Some species of birds are sensitive to off-trail activities, particularly dog walking (greater area of influence) (Miller et al. 2001).
- Patterns of wildlife habitat use can be disrupted by disturbances occurring outside of regular human activity, such as large recreation events, off-trail visitor behavior, or the proliferation of new social trails, even in areas that traditionally see high levels of visitor use (Mitrovich et al. 2020).

The Project has proposed to Mitigation Measure BIO-9: *Prepare and Implement Construction Best Management Practices and Operations Recreation Plan*, to mitigate for potential impacts of

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recreation on biological resources. Mitigation Measure BIO-9 proposes seasonal closures during sensitive periods and seasonal restrictions on certain recreational uses. Seasonal closures would only mitigate for potential impacts on wildlife during certain times of the year (e.g., bird nesting season). However, wildlife could use or occupy habitat year-round. Wildlife could become displaced or extirpated from otherwise functional habitat where recreational activities are created or increased. Seasonal closures alone may be insufficient to mitigate for the Project's potential to displace or extirpate wildlife. Accordingly, inadequate avoidance, minimization, and mitigation measures for impacts to sensitive or special status species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species by CDFW and/or U.S. Fish and Wildlife Service (USFWS).

### **Recommended Potentially Feasible Mitigation Measure(s)**

**Mitigation Measure #1:** CDFW recommends LACPW include measures under Mitigation Measure BIO-1 or BIO-9 (or where appropriate) whereby individual subsequent projects analyze impacts of recreational activities on biological resources. At a minimum, an analysis should include:

- 1) potential direct and indirect impacts on wildlife as a function of each type of recreational activity proposed and associated increases in human activity, noise, and lighting; and,
- 2) potential for wildlife to be entangled in furnishings (e.g., perimeter fencing or netting around basketball courts) associated with each recreational activity.

**Mitigation Measure #2:** CDFW recommends LACPW provide a mitigation measure whereby recreational activities proposed by individual subsequent projects avoid known breeding and nursery sites for sensitive and special status species (e.g., least Bell's vireo). At a minimum, a project should restrict or modify trails, trail dimensions, number of trails, spatial arrangement of trails, access points, and all recreation-related structures to avoid sensitive areas.

**Mitigation Measure #3:** CDFW recommends LACPW provide a mitigation measure whereby recreational activities proposed by individual subsequent projects incorporate appropriate setbacks or restrictions if avoidance is not feasible. An appropriate setback should consider the species (e.g., alert and flight initiation distances) and type and intensity of recreational use proposed (e.g., trail, pavilion, lookout). A project should restrict activities that are likely to have greater impacts such as dog walking and horseback riding near sensitive and special status species habitat. A project should restrict the size of gathering areas such as pavilions to limit the number of users to a smaller group.

### **Comment #2: California Fully Protected Bird Species**

**Issue:** The Project may impact California Fully Protected bird species.

**Specific impacts:** According to Table 3.3-3 in Chapter 3.3, *Biological Resources*, the following California Fully Protected bird species have a potential to occur along the LA River: American peregrine falcon (*Falco peregrinus*); bald eagle (*Haliaeetus leucocephalus*); California brown pelican (*Pelecanus occidentalis californicus*); and California least tern (*Sterna albifrons browni*). Project construction and activities, directly or through habitat modification, may result in injury or mortality, reduced reproductive capacity, population declines, or local extirpation of these

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California Fully Protected bird species. Temporal or permanent loss of foraging, breeding, nesting, or nursery habitat may occur.

**Why impacts would occur:** Impacts to these species may occur as a result of ground-disturbing (e.g., staging, mobilization, demolition, and grading) activities, vegetation removal, increased human activity, noise disturbances, light, and dust. The Project proposes mitigation for nesting birds and raptors by implementing a buffer of up to 500 feet for a raptor nest and an appropriate distance for a non-raptor nest as determined by a biologist. Buffers for birds and raptors may not be large enough to avoid impacts on nests of California Fully Protected birds. Moreover, the Project's proposed buffers only mitigates for impacts on nests, eggs, and nestlings during the bird/raptor breeding season. California Fully Protected species may not be taken at any time. Accordingly, an adequate mitigation plan would need to also avoid impacts on a California Fully Protected species during all life stages.

**Evidence impact would be significant:** The Project may result in adverse effects, either directly or through habitat modifications, on a California Fully Protected species. Take of any species designated as California Fully Protected under the Fish and Game Code is prohibited. CDFW cannot authorize the take of any California Fully Protected species as defined by State law. California Fully Protected species may not be taken or possessed at any time. No licenses or permits may be issued for take, except for collecting those species for necessary scientific research and relocation of the bird species for protection of livestock (Fish & G. Code, § 3511).

### **Recommended Potentially Feasible Mitigation Measure(s)**

**Mitigation Measure #1:** CDFW recommends LACPW provide a mitigation measure whereby individual subsequent projects avoid impacts on California Fully Protected birds by implementing a minimum 0.5-mile no-disturbance buffer around each nest of a California Fully Protected bird. Additionally, a qualified biologist should develop a robust avoidance, buffer, and demarcation plan specifically for California Fully Protected birds depending on project-level specifics [e.g., project area, species, life stage(s), scope of work].

**Mitigation Measure #2:** CDFW recommends Mitigation Measure BIO-3c, *Active Eagle Nest Avoidance Measures*, be modified to state that a lead agency will also notify and consult with CDFW (in addition to USFWS) if a bald eagle nest is detected within a project area.

### **Comment #3: Lake and Streambed Alteration Agreement**

**Issue:** The Project may impact streams.

**Specific impacts:** The Project may result in temporary or permanent modifications to a stream.

**Why impacts would occur:** The Project may modify the LA River by modifying the channel (KOP Category 2), creating platform parks on a land bridge across the channel, and installing diversion structures (KOP Category 4). Diversion structures may obstruct water flow and change the bed and channel of a stream (confinement). Water diversion may adversely affect the existing stream pattern, potentially resulting in substantial erosion or siltation within the project area and downstream.

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**Evidence impacts would be significant:** Fish and Game Code section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW prior to beginning any activity that may do one or more of the following:

- Divert or obstruct the natural flow of any river, stream, or lake;
- Change the bed, channel, or bank of any river, stream, or lake;
- Use material from any river, stream, or lake; or,
- Deposit or dispose of material into any river, stream, or lake.

The construction of diversion devices such as deployable barriers and inflatable dams, and conveyance of water structures within a stream is subject to notification under Fish and Game Code section 1602. The ongoing operations and maintenance of instream storm flow diversion devices and conveyance of water structures is also subject to notification under Fish and Game Code section 1602 once the devices are constructed. Also, the diversion of stormwater and/or dry weather runoff that flows within streams or that have overflowed the banks of streams, is subject to notification under Fish and Game Code section 1602.

### **Recommended Potentially Feasible Mitigation Measure(s)**

**Mitigation Measure:** CDFW recommends LACPW modify Mitigation Measure BIO-21c, *Obtain Wetland Permits*, to include the underlined language:

“If wetlands or jurisdictional aquatic resources are identified within the project footprint and would be affected by construction of the project, the appropriate permits will be obtained from the USACE, SWRCB or RWQCB, CDFW, and/or the CCC, as required. CDFW shall be notified pursuant to Fish and Game Code, section 1600 et seq. Based on this notification and other information, CDFW will determine whether a Lake and Streambed Alteration (LSA) Agreement is required prior to conducting proposed activities. An LSA Notification shall include the following: 1) an analysis to demonstrate that concrete-lined or soft-bottom channels would not be impaired (e.g., aggraded, incised, increased suspended sediment), 2) a hydrological evaluation of the 200, 100, 50, 25, 10, 5, and 2-year frequency storm event for existing and proposed conditions, 3) whether dewatering/diversion of water may be necessary, and (if applicable) 4), an analysis of whether diversion structures would impact stormwater and dry season water flow, and the extent of those impacts, during the wet season (November through March), dry season (April through October), and both above-average and below-average water year.”

**Recommendation:** CDFW’s issuance of an LSA Agreement for 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 CEQA document from a lead agency for a project. To minimize additional requirements by CDFW pursuant to Fish and Game Code section 1600 et seq. and/or under CEQA, the CEQA 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.

To compensate for any on- and off-site impacts to riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: erosion and pollution control measures, avoidance of resources, protective measures for downstream resources, on- and/or

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off-site habitat creation, enhancement or restoration, and/or protection, and management of mitigation lands in perpetuity.

#### **Comment #4: Water Diversion and Impacts on Beneficial Uses**

**Issue:** The Project may divert surface stormwater and dry season flow from the LA River.

**Specific impact:** Diverting stormwater and dry season flow into stormwater catchment basins or infiltration galleries may reduce the availability and extent of water flow. There could be changes to the hydrologic regime both within the immediate area and downstream. Changes to the hydrologic regime could affect abiotic and biotic variables that support plants, fish, wildlife, and macroinvertebrates. Significant impacts to biological resources could occur, especially during a dry season proceeding after a below-average water year.

**Why impacts would occur:** The PEIR does not provide sufficient analysis as to whether the Project, specifically diversion devices proposed under KOP Category 2 and KOP Category 4, would impact biological resources both within a project area and downstream.

*Biological Resources:* Both the concrete-lined and soft-bottom portions of the LA River support biological resources. Where the LA River overtops the concrete-lined channel, the resulting sheet flows allow phytoplankton (algae and cyanobacteria), microorganisms, and herbaceous vegetation to establish. The algae provide habitat and a food source for benthic invertebrates, a vital food source for wading birds. The LA River provides habitat for 140 species of birds (USACE 2015). The least Bell's vireo (*Vireo bellii pusillus*), an Endangered Species Act and CESA-listed endangered species, has been documented at Glendale Narrows. Least Bell's vireo depends on willow (*Salix* genus) riparian habitat. The LA River supports woody vegetation such as black willow (*Salix gooddingii*), Fremont cottonwood (*Populus fremontii*), and arroyo willow (*Salix laevigata*) (USACE 2015). The upper LA Basin watershed supports Santa Ana sucker (*Catostomus santaanae*) and arroyo chub (*Gila orcutti*) (USACE 2015). The LA River could potentially support southern California steelhead (*Oncorhynchus mykiss*) Distinct Population Segment, Pacific lamprey (*Entosphenus tridentatus*), speckled dace (*Rhinichthys osculus*), and California killifish (*Fundulus parvipinnis*).

Flow reductions, especially dry season flow, could impact beneficial uses directly or indirectly through habitat modifications. Diverting water during the dry season could reduce the availability and extent of shallow water sheet flow. This could potentially impact algae and benthic invertebrates, and eventually birds. Willow riparian habitat may be impacted if flow reductions lead to receding shoreline or lower water depth. Loss of suitable habitat may impact sensitive species such as least Bell's vireo. Fish have specific habitat requirements including water depth, velocity, and vegetation.

*Seasonality:* The PEIR does not analyze the potential significance of water diversion depending on the season. During the dry season, typically April through September in southern California, the LA River is largely maintained by urban runoff and discharge from wastewater reclamation plants. Diverting water could be significant during the dry season and could either significantly reduce water flow or result in complete loss of water flow.

*Drought:* The PEIR does not analyze the potential significance of water diversion during a below-normal water year. Since 2000, the longest duration of drought in California lasted

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between 2011 and 2019 (USGS 2021) and in southern California, between 2012 through 2016 (Los Angeles Almanac 2021). The 2017-2018 rainfall season was below normal and the driest for Los Angeles since 2006-2007 (Los Angeles Almanac 2021). Diverting water during a below-normal rainfall year may significantly reduce water flow or result in complete loss of water flow.

*Cumulative Flow Reductions:* The PEIR does not analyze whether the Project would result in significant impacts when considered with other existing or proposed water diversion projects in the LA River watershed. The cities of Burbank, Glendale, and Los Angeles plan to recycle more wastewater and reduce their discharges to the LA River for this purpose (SCCWRP 2021).

**Evidence impacts would be significant:** Changes to hydrology and channel morphology, both within a project area and downstream, are reasonable potential direct and indirect physical changes in the environment. Said changes and their potential impacts on biological resources should be analyzed and disclosed in an environmental document. Adequate disclosure is necessary for CDFW to assist a lead agency in adequately identifying, avoiding, and/or mitigating a project's significant, or potentially significant, direct, and indirect impacts on biological resources. Inadequate avoidance, minimization, and mitigation measures for impacts to sensitive or special status species will result in a project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species by CDFW, USFWS, and/or National Marine Fisheries Service (NMFS).

### **Recommended Potentially Feasible Mitigation Measure(s)**

**Mitigation Measure:** CDFW recommends LACPW include a mitigation measure whereby individual subsequent projects analyze potential impacts on biological resources resulting from proposed water diversion. At a minimum, an analysis and should include:

#### *Study Reach*

- 1) A study reach that includes an additional length of channel downstream from a project site. The additional study reach should extend a minimum of 1 mile downstream, or to the extent of the LA River downstream that could be expected to be affected similarly by a proposed project (hydraulic and ecological zones), or an appropriate distance determined by both a qualified biologist and hydrologist, whichever is greater.

#### *Changes to Hydrology and Hydraulics*

- 1) Under pre-project (i.e., baseline) conditions, the volume of water flow from both the project area and study reach during a) the wet (November through March); b) the dry season (April through October); and c) above-average and below-average water year (i.e., wet season/above-average water year, wet season/below-average water year, dry season/above-average water year, and dry season/below-average water year). The analysis should clearly define above-average or below-average rainfall year.
- 2) Under proposed project conditions, the percent reduction in flow from both the project area and study reach for a wet season/above-average water year, wet season/below-average water year, dry season/above-average water year, and dry season/below-average water year.
- 3) A quantitative analysis comparing the flow from the project area and other tributaries into the study reach, and their relative contribution to the hydrograph of the study reach.
- 4) An analysis of potential project-related changes to river hydraulics in both concrete-lined

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and soft-bottom reaches. This includes water depth (percent change), wetted perimeter (acres gained/lost), and velocity (percent change).

*Biological Resources Impact Assessment*

- 1) A map of plant communities and important bird foraging and nesting habitat occurring in the study reach. Plant communities should be mapped at the alliance/association level using the [Manual of California Vegetation](#), second edition (Sawyer et al. 2009). Also, CDFW recommends an updated and thorough floristic-based assessment of plant communities, following CDFW's [Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities](#) (CDFW 2018).
- 2) A comprehensive list of sensitive and special status plant and wildlife species, and sensitive plant communities, occurring in the study reach. For each biological resource, provide:
  - a. A summary of species-specific habitat requirements;
  - b. A discussion as to how the species or plant community may be significantly impacted directly or indirectly through habitat modification, as result of changes to hydrology (reduced flow) and hydraulics (water depth, wetted perimeter, velocity); and,
  - c. A quantitative analysis and/or adequate discussion to evaluate whether the project would result in those significant impacts.
- 3) A discussion of whether construction, operations, and maintenance of diversion devices such as rubber dams, pipes, and tunnels, would have direct and/or indirect, permanent or temporal impact on biological resources.
- 4) An adequate discussion to address how the project may potentially affect on-going habitat recovery and restoration efforts.
- 5) An adequate discussion of project-related impacts on biological resources in relation to cumulative flow reductions.

**Mitigation Measure #2:** For projects proposing to divert water, CDFW recommends LACPW include a mitigation measure whereby individual subsequent projects develop an Adaptive Management Plan that would reduce or suspend water diversion if at any point the project may impact biological resources downstream exceeding a defined threshold/trigger.

**Mitigation Measure #3:** CDFW recommends project-level lead agencies/applicants provide a copy of the basis of water right (water right permit) by State Water Resources Control Board that authorizes the beneficial use of stormwater or dry weather flows diverted from streams. This information along with the LSA Notification would assist CDFW in assessing the need for an LSA Agreement. CDFW recommends including documentation of water rights in a project-level CEQA document to ensure project budgets and timelines consider CDFW's regulatory process in the implementation of projects under the 2020 LA River Master Plan.

**Comment #5: Anadromous Fish Habitat and Passage**

**Issue:** The Project may impact anadromous fish habitat and passage.

**Specific impacts:** The Project may create impassable artificial barriers to the passage of anadromous fish such as the southern California steelhead Distinct Population Segment, an endangered species under the Endangered Species Act. Accordingly, the Project may further

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degrade habitat that could support southern California steelhead that may pass through the LA River or migrate upstream from the estuary in the absence of threats or stressors. Additionally, the Project may result in construction, activities, and design elements that could impede any future recovery efforts for southern California steelhead in the LA River watershed.

**Why impacts would occur:** The Project may include modifications to the channel, creation of platform parks on a land bridge across the channel, or installation of diversion structures. KOP Category 2 includes check dams, deployable barriers, levees, armored channels/vertical walls, remove/add concrete, channel texturing/grooving/smoothing, reshape low flow, and installation of access ramps. KOP 4 includes diversion structures such as pumps, pipes/tunnels/channels, overflow weirs, and side channels. These structures could be barriers to anadromous fish passage.

**Evidence impacts would be significant:** In southern California, at the southern limit of the range for southern California steelhead, it is estimated that annual runs have declined dramatically from 32,000-46,000 returning adults historically, to currently less than 500 returning adults (NMFS 2012). The LA River historically supported southern California steelhead, but the species has been extirpated from the LA River watershed (USACE 2015). Southern California steelhead has been extirpated for reasons including the channelization of the LA River, urbanization of the floodplain, barrier structures such as dams, and surface water diversions. These impacts have eliminated the ability of fish to move freely upstream-to-downstream and to find adequate locations for refuge and proliferation (USACE 2015). The LA River has a highly altered flow regime and functions more as a drainage channel than a river ecosystem. Input of gravels and cobbles are prevented, water temperatures are higher, channel morphology is simplified, and the episodic succession-setting flood regime necessary to sustain target riparian communities and native fish habitats has been altered (USACE 2015).

The Project may result in structures that are considered very high threats or stressors to southern California steelhead and their habitat. This includes dams, surface water diversion structures, levees, and channelization (NMFS 2012). Per CEQA Guidelines section 15065(a), a project may have a significant effect on biological resources if the project has the potential to substantially reduce the habitat of a fish species or substantially reduce the number or restrict the range of a special status species. Per Fish and Game Code section 5901, it is unlawful to construct or maintain in any stream any device or contrivance that prevents, impedes, or tends to prevent or impeded, the passing of fish up and downstream. Per Fish and Game Code section 5937, the owner of any dam shall allow sufficient water at all times to pass through a fishway, or to keep in good condition any fish that may be planted or exists below the dam.

### **Recommended Potentially Feasible Mitigation Measure(s)**

**Mitigation Measure #1:** CDFW recommends LACPW include measures under Mitigation Measure BIO-1 or BIO-23 (or where appropriate) whereby individual subsequent projects analyze impacts on southern California steelhead. At a minimum, an analysis should include:

- 1) potential direct and impacts on southern California steelhead population, habitat, and passage;
- 2) whether the project area supports existing structures that create barriers to southern California steelhead passage; and,
- 3) whether the project may affect ongoing or future native fish recovery projects throughout

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the LA River watershed per federal, State, county, city, or other agencies.

**Mitigation Measure #2:** CDFW recommends LACPW provide a mitigation measure whereby individual subsequent projects modify design components to the maximum extent feasible (e.g., size or location of structures) so they are not barriers, threats, or stressors to fish passage. If feasible, a project should remove existing fish passage barriers and provide fish passage around dams, diversions, and other barriers that may not be feasible to remove.

**Mitigation Measure #3:** CDFW recommends LACPW provide a mitigation measure whereby individual subsequent projects allow sufficient water at all times to pass through in order to allow fish passage and sustain any fish existing within the project area or downstream. This should be for both during and for the life of the project. Effort should be made to incorporate fish passage standards for velocity and depth as outlined in the [Southern California Steelhead Recovery Plan](#) (NMFS 2012) and the [California Salmonid Stream Habitat Restoration](#) Manual, 4<sup>th</sup> edition, Volume I and II (CDFW 2004). Also, a project should avoid creating any temporal barriers that would alter water velocity or depth meeting fish passage standards.

**Recommendation #1:** CDFW recommends that individual subsequent projects make a concerted effort to create habitat and design a channel that could support multiple life stages and life history strategies exhibited by southern California steelhead. Essential habitat components should be provided, including refugia to allow fish to withstand high flows, soft-bottom spawning areas to bury eggs, and restoration of riffle/pool complexes. A project should consider waters and substrate necessary to southern California steelhead for spawning, breeding, feeding, or growth to maturity. Floodplain connectivity is also important for restoration of critical spawning and rearing habitats.

**Recommendation #2:** CDFW recommends LACPW include a section in Appendix B that would provide general design guidelines for creating habitat suitable for southern California steelhead. CDFW recommends the following sources for guidance in finalizing the PEIR and preparation of project-level CEQA documents with respect to creating fish habitat and passage: [Los Angeles River Ecosystem Restoration Integrated Feasibility Report](#) (USACE 2015), [Southern California Steelhead Recovery Plan](#) (NMFS 2012), [Los Angeles River Environmental Flows Project](#) (SCCWRP 2021), [The Los Angeles River Fish Passage & Habitat Structures Design Project](#) (CWH 2018); the [State Wildlife Action Plan 2015](#), Chapters 5.5 and 6 (CDFW 2015), and the [California Salmonid Stream Habitat Restoration](#) Manual, 4<sup>th</sup> edition, Volume I and II (CDFW 2004).

#### **Comment #6: Impacts on Riparian Habitat**

**Issue:** The Project may impact riparian habitat.

**Specific impacts:** The Project may result in temporary or permanent loss of riparian resources.

**Why impacts would occur:** According to Chapter 3.3, *Biological Resources*, the LA River contains riparian vegetation communities. This includes Fremont cottonwood Forest Alliance, black willow Woodland Alliance, and mulefat thickets (*Baccharis salicifolia*) Shrubland Alliance. These vegetation communities could be impacted during project construction and activities. This could result in temporary or permanent loss of riparian habitat. Vegetation communities may also be impacted through changes to hydrology (e.g., amount of flow) and hydraulics (e.g.,

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wetted perimeter and depth). These changes may occur if a project modifies the channel, creates a platform parks on a land bridge across the channel, or installs diversion structures. Willow riparian habitat may be impacted if reduced flow leads to lower water depth or receding shoreline. Preliminary work of the [Los Angeles River Flows Project](#) shows that black willow seedling mortality increases as water depth decreases (SCCWRP 2019). Increased sediment deposition can bury seedlings and saplings of riparian trees, resulting in increased mortality of new recruits (Kui and Stella 2016).

**Evidence impacts would be significant:** Only relic and fragmented riparian habitat remain along the significantly channelized, engineered, and urbanized LA River and floodplain. Over 90 percent of southern California’s coastal riparian habitat have been lost (USACE 2015). The remaining fragments of LA River riparian habitat contribute significantly to the integrity of regional hydrologic connectivity, biodiversity, and habitat connectivity and wildlife movement between significant ecological areas, including the Santa Monica Mountains, the Verdugo Hills, and nationally significant San Gabriel Mountains National Monument (USACE 2015). Therefore, loss of remaining riparian habitat could affect regional hydrologic, habitat, and wildlife connectivity, and increase threats/stressors on regional biodiversity. Per CEQA Guidelines section 15065(a), a project may have a significant effect on biological resources if the project substantially reduces the habitat of a fish or wildlife species; threatens to eliminate a plant community; or has the potential to restrict the range of an endangered, rare, or threatened species.

### **Recommended Potentially Feasible Mitigation Measure(s)**

**Mitigation Measure:** CDFW recommends that LACPW modify Mitigation Measure BIO-21e to include the underlined language:

“Impacts that result in a permanent loss of jurisdictional aquatic resources within an earthen channel, bank, or associated riparian will be mitigated at a minimum 2:1 ratio, or as specified in the aquatic resource permits. There shall be no net loss of riparian habitat within the LA River. Mitigation for impacts to riparian habitat shall be provided within the project area and/or along the LA River. Compensatory mitigation shall increase if a project would result in permanent loss of riparian habitat within a contiguous riparian corridor or loss of an isolated, remnant habitat patch. Mitigation shall increase if a project would impact a riparian vegetation community considered rare in the State (i.e., S1, S2, or S3). Mitigation shall further increase if the riparian habitat is considered very threatened or threatened (i.e., 0.1, 0.2). Mitigation shall further increase if the riparian habitat impacted supports special status species, specifically obligate riparian breeders (e.g., least Bell’s vireo). Mitigation shall replace the same vegetation association/alliance that was impacted.”

### **Comment #7: California Species of Special Concern**

**Issue:** The Project may impact California Species of Special Concern (SSC).

**Specific impacts:** According to Table 3.3-3 in Chapter 3.3, *Biological Resources*, the LA River has the potential to support SSC, which includes 10 species of birds, one fish, four amphibians, six reptiles, and 12 mammals. Project construction and activities, directly or through habitat modification, may result in direct injury or mortality (trampling, crushing), reduced reproductive capacity, population declines, or local extirpation of an SSC. Temporal or permanent loss of

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foraging, breeding, nesting, or nursery habitat for an SSC may occur.

**Why impacts would occur:** Impacts to an SSC could result from ground-disturbing (e.g., staging, mobilization, demolition, and grading) activities, vegetation removal, increased noise disturbances, light, human activity, and dust.

**Evidence impact would be significant:** A [California Species of Special Concern](#) is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, is extirpated in its primary season or breeding role;
- is listed as ESA-, but not CESA-, threatened, or endangered; meets the State definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; and/or,
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for CESA threatened or endangered status (CDFW 2021a)

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 rare, threatened, or endangered species (CEQA Guidelines, § 15380). Therefore, take of SSC could require a mandatory finding of significance (CEQA Guidelines, § 15065). Inadequate avoidance and mitigation measures will result in the Project continuing to have a substantial adverse direct and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species by CDFW.

### **Recommended Potentially Feasible Mitigation Measure(s)**

**Mitigation Measure #1:** If impacts are unavoidable, wildlife should be protected, allowed to move away on its own (noninvasive, passive relocation), or relocated to adjacent appropriate habitat on site or to suitable habitat adjacent to the project area. SSC should be captured only by a qualified biologist with proper handling permits. The qualified biologist should prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. A relocation plan should be prepared prior to implementing any Project-related ground-disturbing activities and vegetation removal.

While relocation is an option for mitigating impacts, it may not fully account for impacts to an SSC, such as loss of individuals, loss of habitat, or loss of natal dens/middens/burrows. Capturing, handling, or relocation are acts that may have multiple unintended negative consequences, including increased stress and mortality of relocated animals, negative impacts on resident animals at release sites, increased conflicts with human interests, and the spread of diseases. Attempts to avoid impacts to SSC should be the first option. Seeking a [Scientific Collection Permits](#) (see Mitigation Measure #2 below) in order to trap and relocate individuals should only be done if impacts cannot be avoided.

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**Mitigation Measure #2:** Handling and relocation of wildlife, including SSC, may be required. If so, Pursuant to the [California Code of Regulations, title 14, section 650](#), the lead agency/qualified biologist should obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities. Please visit CDFW's [Scientific Collection Permits](#) webpage for information (CDFW 2021b). An LSA Agreement may provide similar take or possession of species as described in the conditions of the Agreement.

CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & G. Code, §§ 1002, 1002.5, 1003). Effective October 1, 2018, a Scientific Collecting Permit is required to monitor project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (Cal. Code Regs., tit. 14, § 650).

**Mitigation Measure #3:** CDFW recommends providing compensatory mitigation for temporary and/or permanent loss of any habitat supporting SSC. There should be no net loss of habitat supporting SSC along the LA River. Compensatory mitigation for should be provided within the project area and/or along the LA River. Compensatory mitigation should be provided at no less than 2:1. Mitigation should provide upland and/or aquatic habitat (depending on the species), refugia, and habitat structures that supports that species (e.g., woody material, rocks, brush piles, pools, burrows). Any proposed mitigation area/plan should include a discussion on the territory size; nesting, breeding, foraging, and refuge, locations, invasive, non-native plant and wildlife species present, food availability, and how all life cycle functions will be mitigated. Mitigation for impacts to an SSC should adhere to CDFW and/or USFWS established protocol/guidelines if available.

#### **Comment #8: Impacts of Fencing on Wildlife and Wildlife Dispersal**

**Issue:** The Project's proposed temporary and permanent fencing, gates, and guardrails could impact wildlife, particularly birds and raptors, as well as create barriers to wildlife dispersal.

**Specific impacts:** Project fencing during the construction phase and for the life of the Project may directly impact wildlife. Fencing could result in the mortality of mammals, birds, and raptors. Additionally, permanent fencing, gates, and guardrails along the LA River where adjacent to natural areas could create barriers to wildlife dispersal.

**Why impacts would occur:** Project-related fencing, gates, and guardrails could impact wildlife both during and for the life of the Project. The LA River supports habitat for hundreds of bird species including special status bird species. According to the Project's Mitigation Measure BIO-4, *Identify Work Areas and Environmentally Sensitive Areas*, environmental sensitive areas would be delineated using "fencing, flagging, and other methods of demarcation." As such, the Project may use fencing that could trap or entangle mammals, birds, and raptors. Birds can collide with fences, breaking wings, impaling themselves on barbs, and tangling in wires. Large, low-flying birds such as ducks, geese, cranes, grouse, hawks, and owls are especially vulnerable. Waterfowl fly into fences that run near or across waterways, and low-flying hawks and owls may careen into fences when swooping in on prey.

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Temporary construction fencing may also impact wildlife by creating a barrier to dispersal. Impermeable fencing such as chain link may make it more difficult for wildlife to move between locations. More permanent fixtures, such as the fences, guardrails, and gates proposed in *Appendix B Volume 1 Design Guidelines* could create permanent barriers to wildlife dispersal across the broader landscape, potentially impacting both transitory and permanent wildlife populations.

**Evidence impacts would be significant:** The Project may cause wildlife injury or mortality and/or local extirpation of wildlife. The Project site and surroundings is highly urbanized and developed, which has led to habitat loss, modification, or fragmentation. It is possible that the Project could increase pressures on wildlife dispersal without appropriate mitigation. Mammals occurring naturally in California 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). Inadequate avoidance and mitigation measures will result in the Project continuing to have a substantial adverse direct and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species by CDFW and/or USFWS.

### **Recommended Potentially Feasible Mitigation Measure(s)**

**Mitigation Measure: Construction Fencing** – CDFW recommends that all Project-related fencing be constructed with materials that are not harmful to wildlife. CDFW recommends LACPW amend Mitigation Measure BIO-4 to include the following underlined language to reduce potential wildlife injury or mortality:

“[...] Delineation of [Environmentally Sensitive Areas] will include fencing, flagging, and other methods of demarcation sufficient to prevent entry into the [Environmentally Sensitive Area]. Prohibited materials shall include, but are not limited to, spikes, glass, razor, or barbed wire. Use of chain link and steel stake fence shall be avoided or minimized. Fences shall not have any slack that may cause wildlife entanglement. No grading or fill activity of any type will be permitted within Environmentally Sensitive Areas [...]. Environmentally Sensitive Area fencing and exclusion fencing will remain in place and be maintained until project construction is completed. If, during the project phase, wildlife becomes entangled in construction fencing, work must immediately stop, a qualified biologist notified, and dead or injured wildlife documented immediately. If injury or mortality involves a special status species, the qualified biologist shall notify CDFW and/or USFWS within three calendar days of the incident or finding. Work in the immediate area may only resume once the proper notifications have been made and/or additional mitigation measures have been identified to prevent additional injury or mortality.”

**Recommendation: Permanent Fencing, Gates, and Guardrails** – CDFW recommends that LACPW include a section in Appendix B that would provide design guidelines for wildlife friendly and permeable fencing [see [A Landowner's Guide to Wildlife Friendly Fences](#) for additional information (MFWP 2012)]. CDFW also recommends that LACPW amend the Project's Mitigation Measure BIO-23, *Maintain Connectivity in Subsequent Project Design, Construction, and Operation*, to reference those design guidelines.

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### **Comment #9: Tree Diseases, Pests, and Pathogens**

**Issue:** The Project may remove trees and spread material infected with invasive tree diseases, pests, and pathogens.

**Specific impacts:** The Project may spread of tree insect pests and diseases into areas not currently exposed to these stressors. This could result in expediting the loss of native trees and plant communities. Loss of trees may result in loss of foraging and perching habitat for small mammals, birds, and raptors.

**Why impacts would occur:** The Project may remove trees that could host diseases and pests. One such pathogen is sudden oak death. Sudden oak death has become the most common cause of mortality of oak (*Quercus* genus) and other native trees (Phytosphere 2015). Mortality rates of oak trees are greater than 50 percent in some areas impacted by sudden oak death (Phytosphere 2012). Tree dieback can have cascading impacts on the habitat and ecosystem, particularly avian distribution and abundance (Monahan and Koenig 2006). One such pest is the polyphagous shot hole borer, which hosts on many native trees species that include box elder (*Acer negundo*), California sycamore (*Platanus racemosa*), willows (*Salix* genus), oaks, cottonwoods (*Populus* genus), and alders (*Alnus* genus) (Calinvasives 2021). Diseases such as sudden oak death can spread via equipment and transport of infected material. These fragments can be spread to new locations if equipment and tools are not disinfected or cleaned before moving to the next work location. Infected material that is transported off site for disposal may expose trees and plant communities to pest and disease. This could result in expediting the loss of southern California black walnut (*Juglans californica*), oak trees, and other native trees and plant communities within and adjacent to a project area.

**Evidence impacts would be significant:** The Project may have a substantial adverse effect on any sensitive natural communities identified in local or regional plans, policies, and regulations or by the CDFW. The Project may result in a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW that are dependent on woodlands susceptible to insect and disease pathogens.

### **Recommended Potentially Feasible Mitigation Measure(s)**

**Mitigation Measure:** CDFW recommends that LACPW include a measure to mitigate the spread of invasive pests and diseases by implementing the following:

- 1) Prior to tree removal, a certified arborist should evaluate trees for infectious tree diseases including but not limited to: [sudden oak death](#) (*Phytophthora ramorum*), [thousand canker fungus](#) (*Geosmithia morbida*), [polyphagous shot hole borer](#) (*Euwallacea* spp.), and [goldspotted oak borer](#) (*Agrilus auroguttatus*) (TCD 2021; UCANR 2021; Phytosphere Research 2012; UCIPM 2013).
- 2) If a certified arborist determines trees are impacted by infectious pests or diseases, the certified arborist should prepare an Infectious Tree Disease Management Plan or develop a detailed, robust, enforceable, and feasible list of preventative measures. A plan/list should provide measures relevant for each tree pest or disease observed. To avoid the spread of infectious tree pests and diseases, infected trees should not be transported from a project area without first being treated using best available

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management practices described Infectious Tree Disease Management Plan or list of preventative measures.

- 3) If possible, all tree material, especially infected tree material, should be left on site. The material could be chipped for use as ground cover or mulch. Pruning and power tools should be cleaned and disinfected before use to prevent introducing pathogens from known infested areas, and after use to prevent spread of pathogens to new areas.

## **Additional Recommendations**

Rare Plant Surveys. The Project's proposed Mitigation Measure BIO-1, *Conduct Literature Review, Habitat Assessment, and Project Surveys*, as it is currently proposed, may result in missed detections of rare plants not previously known to occur at a project site. This may result in population declines or local extirpation of a rare plant species. CDFW recommends LACPW amend Mitigation Measure BIO-1 to include the underlined language:

"[...] will be assessed for candidate, sensitive, or special-status plants and/or wildlife, aquatic resources, sensitive natural communities, wildlife corridors or nurseries, biological resources protected by local ordinances policies, such as protected trees or other regulated biological resources, while identifying and mapping all vegetation communities and land-cover types (initial study). To determine presence/absence or accurately identifying rare plants, a qualified botanist shall conduct multiple rare plant surveys throughout the growing season for any given year. Surveys shall occur during the time of year when rare plants are more likely to be visually detectable. Rare plant surveys proceeding after a low water year shall be supplemented with one or two additional rare plant surveys over a number of years depending on the rare plant species, annual weather patterns, and whether the project area was recently disturbed (e.g., fire).

Rodenticides. CDFW recommends LACPW include second-generation anticoagulant rodenticides as a prohibited poison under Mitigation Measure BIO-17, *Prepare and Implement Pest Management Plan*.

State Wildlife Action Plan (SWAP) 2015. The [SWAP 2015](#) describes the key conservation factors crucial to the sustainability of California ecosystems, and for each geographic province, provides specific conservation strategies that will either reduce or ameliorate negative impacts to ecological systems or enhance the qualities vital to the natural landscapes of California (CDFW 2015). Prior to finalizing the PEIR, CDFW recommends LACPW review the SWAP and consider whether the Project could incorporate KOPs, modify mitigation measures, and/or include design components that are consistent with the SWAP. CDFW recommends LACPW consider Chapters 5.5 South Coast Province and Chapter 6 Anadromous Fish. Also, CDFW recommends the final PEIR refer to the SWAP 2015 so project-level planning is consistent with the objectives and recommendations in the SWAP 2015.

Los Angeles Biodiversity Project. In 2015, the City of Los Angeles (City) set a goal of "no net loss" of biodiversity by 2035. In 2017, the City Council passed a Biodiversity Motion which directs the development of a biodiversity index for Los Angeles, focused on conservation and access to nature and biodiversity in urban areas. The City's biodiversity work is being led by the Los Angeles Sanitation and Environment, which recently publish a [Draft 2020 Biodiversity](#)

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Report (LASAN 2020). “Native Species Protection and Enhancement” is a theme in the City’s biodiversity index. Prior to finalizing the PEIR, CDFW recommends LACPW review the Draft 2020 Biodiversity Report and consider whether the Project could incorporate KOPs, modify mitigation measures, and/or include design components that are consistent with the City’s biodiversity work. Also, CDFW recommends the final PEIR refer to the Biodiversity Report so project-level planning is consistent with the objectives and recommendations in the Biodiversity Report.

Funding. CDFW grant programs fund projects that sustain, restore, and enhance California’s fish, wildlife, plants, and their habitats. Please visit [CDFW Grant Opportunities](#) for more information (CDFW 2021c).

Data. CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database [i.e., California Natural Diversity Database (CNDDDB)] which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Accordingly, CDFW recommends that the PEIR include measures where lead agencies of individual projects tiering from the PEIR report any special status species detected during preparation of project-level environmental impact analyses/environmental documents. Special status species information should be submitted to the CNDDDB by completing the [Online Field Survey Form](#) (CDFW 2021d). The lead agency should ensure all pertinent data has been properly submitted, with all applicable data fields filled out, prior to finalizing/adopting an environmental document. The lead agency should provide CDFW with confirmation of data submittal.

Mitigation and Monitoring Reporting Plan. CDFW recommends LACPW update the Project’s proposed Biological Resources Mitigation Measures and condition the environmental document to include mitigation measures recommended in this letter. CDFW provides comments to assist LACPW in developing 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 (CEQA Guidelines, § 15097; Pub. Resources Code, § 21081.6). LACPW is welcome to coordinate with CDFW to further review and refine the Project’s mitigation measures. Per Public Resources Code section 21081.6(a)(1), CDFW has provided LACPW with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment A).

### **Filing Fees**

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

### **Conclusion**

We appreciate the opportunity to comment on the Project to assist Los Angeles County Public Works in adequately analyzing and minimizing/mitigating impacts to biological resources.

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CDFW requests an opportunity to review and comment on any response that Los Angeles County Public Works has to our comments and to receive notification of any forthcoming hearing date(s) for the Project [CEQA Guidelines, § 15073(e)]. 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](mailto:Ruby.Kwan-Davis@wildlife.ca.gov)

Sincerely,

DocuSigned by:

*Erinn Wilson-Olgin*

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Erinn Wilson-Olgin  
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**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



### Attachment A: Draft Mitigation and Monitoring Reporting Plan

CDFW recommends the following language to be incorporated into a future environmental document for the Project.

<b>Biological Resources (BIO)</b>			
<b>Mitigation Measure (MM) or Recommendation (REC)</b>		<b>Timing</b>	<b>Responsible Party</b>
<b>REC-1- Impacts of Recreation on Wildlife</b>	Individual subsequent projects shall analyze impacts of recreational activities on biological resources. At a minimum, an analysis shall include: 1) a project's potential direct and indirect impacts on wildlife as a function of each type of recreational activity and associated increases in human activity, noise, and lighting; and 2) potential for wildlife to be entangled in furnishings (e.g., perimeter fencing or netting around basketball courts) associated with each recreational activity.	Preparation of project-level CEQA document/ prior to finalizing project-level CEQA document	Project-level lead agency
<b>MM-BIO-2- Impacts of Recreation on Wildlife</b>	Recreational activities proposed by individual subsequent projects shall avoid known breeding and nursery sites for sensitive and special status species (e.g., least Bell's vireo). At a minimum, a project shall restrict or modify trails, trail dimensions, number of trails, spatial arrangement of trails, structures, and access points to avoid sensitive areas.	Preparation of project-level CEQA document/ prior to finalizing project-level CEQA document	Project-level lead agency
<b>MM-BIO-3- Impacts of Recreation on Wildlife</b>	Recreational activities proposed by individual subsequent projects shall incorporate appropriate setbacks or restrictions if avoidance is not feasible. An appropriate setback shall consider the species (e.g., alert and flight initiation distances) and type and intensity of recreational use proposed (e.g., trail, pavilion, lookout). A project shall restrict activities that are likely to have greater impacts such	Preparation of project-level CEQA document/ prior to finalizing	Project-level lead agency

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	as dog walking and horseback riding near sensitive and special status species habitat. A project shall restrict the size of gathering areas such as pavilions to limit the number of users to a smaller group.	project-level CEQA document	
<b>MM-BIO-4- Impacts on California Fully Protected Birds</b>	Impacts on California Fully Protected birds shall be avoided by implementing a minimum 0.5-mile no-disturbance buffer around each nest of a California Fully Protected bird. A qualified biologist shall develop a robust avoidance, buffer, and demarcation plan specifically for California Fully Protected birds depending on project-level specifics [e.g., project area, species, life stages(s), scope of work].	Prior to/During project ground-disturbing activities	Project-level lead agency
<b>MM-BIO-5- Impacts on California Fully Protected Birds</b>	A lead agency shall notify and consult with CDFW (in addition to USFWS) if an eagle nest is detected within a project area.	Prior to project ground-disturbing activities	Project-level lead agency
<b>MM-BIO-6- Impacts on Streams</b>	If wetlands or jurisdictional aquatic resources are identified within the project footprint and would be affected by construction of the project, the appropriate permits will be obtained from the USACE, SWRCB or RWQCB, CDFW, and/or the CCC, as required. CDFW shall be notified pursuant to Fish and Game Code, section 1600 <i>et seq.</i> Based on this notification and other information, CDFW will determine whether a Lake and Streambed Alteration (LSA) Agreement is required prior to conducting proposed activities. An LSA Notification shall include the following: 1) an analysis to demonstrate that concrete-lined or soft-bottom channels would not be impaired (e.g., aggraded, incised, increased suspended sediment), 2) a hydrological evaluation of the 200, 100, 50, 25, 10, 5, and 2-year frequency storm event for existing and proposed conditions, 3) whether dewatering/diversion of water may be necessary, and (if applicable) 4), an analysis of whether diversion structures would impact stormwater and dry season water flow, and the extent of those impacts, during the wet season (November	Prior to issuance of development /grading permits	Project-level lead agency

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	<p>through March), dry season (April through October), and both above-average and below-average water year.</p>		
<p><b>MM-BIO-7- Impacts of Water Diversion on Biological Resources</b></p>	<p>Individual subsequent projects shall analyze potential impacts on biological resources resulting from proposed water diversion. At a minimum, an analysis and shall include:</p> <p><i>Study Reach</i></p> <ol style="list-style-type: none"> <li>1) A study reach that includes an additional length of channel downstream from a project site. The additional study reach shall extend a minimum of 1 mile downstream, or to the extent of the LA River downstream that could be expected to be affected similarly by a proposed project (hydraulic and ecological zones), or an appropriate distance determined by both a qualified biologist and hydrologist, whichever is greater.</li> </ol> <p><i>Changes to Hydrology and Hydraulics</i></p> <ol style="list-style-type: none"> <li>1) Under pre-project (i.e., baseline) conditions, the volume of water flow from both the project area and study reach during a) the wet (November through March); b) the dry season (April through October); and c) above-average and below-average water year (i.e., wet season/above-average water year, wet season/below-average water year, dry season/above-average water year, and dry season/below-average water year). The analysis shall clearly define above-average or below-average rainfall year.</li> <li>2) Under proposed project conditions, the percent reduction in flow from both the project area and study reach for a wet season/above-average water year, wet season/below-average water year, dry season/above-average water year, and dry season/below-average water year.</li> <li>3) A quantitative analysis comparing the flow from the project area and other tributaries into the study reach, and their relative contribution to the hydrograph of the study reach.</li> <li>4) An analysis of potential project-related changes to river hydraulics in both concrete-lined and soft-bottom reaches.</li> </ol>	<p>Preparation of project-level CEQA document/ prior to finalizing project-level CEQA document</p>	<p>Project-level lead agency</p>

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	<p>This includes water depth (percent change), wetted perimeter (acres gained/lost), and velocity (percent change).</p> <p><i>Biological Resources Impact Assessment</i></p> <ol style="list-style-type: none"><li>1) A map of plant communities and important bird foraging and nesting habitat occurring in the study reach. Plant communities shall be mapped at the alliance/association level using the <a href="#">Manual of California Vegetation</a>, second edition. An updated and thorough floristic-based assessment of plant communities shall follow CDFW's <a href="#">Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities</a>.</li><li>2) A comprehensive list of sensitive and special status plant and wildlife species, and sensitive plant communities, occurring in the study reach. For each biological resource, provide:<ol style="list-style-type: none"><li>a. A summary of species-specific habitat requirements;</li><li>b. A discussion as to how the species or plant community may be significantly impacted directly or indirectly through habitat modification, as result of changes to hydrology (reduced flow) and hydraulics (water depth, wetted perimeter, velocity); and,</li><li>c. A quantitative analysis and/or adequate discussion to evaluate whether the project would result in those significant impacts.</li></ol></li><li>3) A discussion of whether construction, operations, and maintenance of diversion devices such as rubber dams, pipes, and tunnels, would have direct and/or indirect, permanent or temporal impact on biological resources.</li><li>4) An adequate discussion to address how the project may potentially affect on-going habitat recovery and restoration efforts.</li></ol>		
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	5) An adequate discussion of project-related impacts on biological resources in relation to cumulative flow reductions.		
<b>MM-BIO-8- Impacts of Water Diversion on Biological Resources</b>	For projects proposing to divert water, individual subsequent projects shall develop an Adaptive Management Plan that would reduce or suspend water diversion if at any point the project may impact biological resources downstream exceeding a defined threshold/trigger.	Prior to water diversion construction and activities	Project-level lead agency
<b>MM-BIO-9- Impacts on Anadromous Fish Habitat and Passage</b>	Individual subsequent projects shall analyze impacts on southern California steelhead. At a minimum, an analysis shall include: 1) potential direct and impacts on southern California steelhead population, habitat, and passage; 2) whether the project area supports existing structures that create barriers to southern California steelhead passage; and 3) whether the project may affect ongoing or future native fish recovery projects throughout the Los Angeles River watershed per federal, State, county, city, or other agencies.	Preparation of project-level CEQA document/ prior to finalizing project-level CEQA document	Project-level lead agency
<b>MM-BIO-10- Impacts on Anadromous Fish Habitat and Passage</b>	Individual subsequent projects shall modify design components to the maximum extent feasible (e.g., size or location of structures) so they are not barriers, threats, or stressors to fish passage. If feasible, a project shall remove existing fish passage barriers and provide fish passage around dams, diversions, and other barriers that may not be feasible to remove.	Preparation of project-level CEQA document/ prior to finalizing project-level CEQA document	Project-level lead agency
<b>MM-BIO-11- Impacts on Anadromous Fish Habitat and Passage</b>	Individual subsequent projects shall allow sufficient water at all times to pass through the project area during and after project construction to allow fish to pass through and to sustain any fish existing within the project area or downstream. This shall be for both during and for the life of the project. Effort shall be made to incorporate fish passage standards for velocity and depth as outlined in the <a href="#">Southern California Steelhead Recovery Plan</a> and the <a href="#">California Salmonid Stream Habitat Restoration Manual</a> . Also,	During/After project construction and activities	Project-level lead agency

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	a project shall avoid creating any temporal barriers that would alter water velocity or depth meeting fish passage standards.		
<b>MM-BIO-12- Impacts on Riparian Habitat</b>	Impacts that result in a permanent loss of jurisdictional aquatic resources within an earthen channel, bank, or associated riparian will be mitigated at a minimum 2:1 ratio, or as specified in the aquatic resource permits. There shall be no net loss of riparian habitat within the LA River. Mitigation for impacts to riparian habitat shall be provided within the project area and/or along the LA River. Compensatory mitigation shall increase if a project would result in permanent loss of riparian habitat within a contiguous riparian corridor or loss of an isolated, remnant habitat patch. Mitigation shall increase if a project would impact a riparian vegetation community considered rare in the State (i.e., S1, S2, or S3). Mitigation shall further increase if the riparian habitat is considered very threatened or threatened (i.e., 0.1, 0.2). Mitigation shall further increase if the riparian habitat impacted supports special status species, specifically obligate riparian breeders (e.g., least Bell's vireo). Mitigation shall replace the same vegetation association/alliance that was impacted.	Prior to project ground-disturbing activities	Project-level lead agency
<b>MM-BIO-13- Impacts on California Species of Special Concern</b>	If impacts are unavoidable, wildlife shall be protected, allowed to move away on its own (noninvasive, passive relocation), or relocated to adjacent appropriate habitat on site or to suitable habitat adjacent to the project area. SSC shall be captured only by a qualified biologist with proper handling permits. The qualified biologist shall prepare a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas. A relocation plan shall be prepared prior to implementing any Project-related ground-disturbing activities and vegetation removal. Attempts to avoid impacts to SSC shall be the first option. Seeking a Scientific Collection Permits in order to trap and relocate individuals shall only be done if impacts cannot be avoided.	Prior to/During project ground-disturbing activities	Project-level lead agency

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<b>MM-BIO-14- Impacts on California Species of Special Concern</b>	Appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities shall be obtained.	Prior to project ground-disturbing activities	Project-level lead agency
<b>MM-BIO-15- Impacts on California Species of Special Concern</b>	Compensatory mitigation shall be provided for temporary and/or permanent loss of any habitat supporting SSC. There shall be no net loss of habitat supporting SSC along the LA River. Compensatory mitigation shall be provided within the project area and/or along the LA River. Compensatory mitigation shall be provided at no less than 2:1. Mitigation shall provide upland and/or aquatic habitat (depending on the species), refugia, and habitat structures that supports that species (e.g., woody material, rocks, brush piles, pools, burrows). Any proposed mitigation area/plan shall include a discussion on the territory size; nesting, breeding, foraging, and refuge, locations, invasive, non-native plant and wildlife species present, food availability, and how all life cycle functions will be mitigated. Mitigation for impacts to an SSC shall adhere to CDFW and/or USFWS established protocol/guidelines if available.	Prior to/During project ground-disturbing activities	Project-level lead agency
<b>MM-BIO-16- Impacts on Wildlife and Wildlife Dispersal</b>	Delineation of Environmentally Sensitive Areas (ESA) will include fencing, flagging, and other methods of demarcation sufficient to prevent entry into the ESA. Prohibited materials shall include, but are not limited to, spikes, glass, razor, or barbed wire. Use of chain link and steel stake fence shall be avoided or minimized. Fences shall not have any slack that may cause wildlife entanglement. No grading or fill activity of any type will be permitted within ESAs. ESA fencing and exclusion fencing will remain in place and be maintained until project construction is completed. If, during the project phase, wildlife becomes entangled in construction fencing, work must immediately stop, a qualified biologist notified, and dead or injured wildlife documented immediately. If injury or mortality involves a special status species, the qualified biologist shall notify CDFW and/or USFWS within three calendar days of the incident or	Prior to/During project ground-disturbing activities	Project-level lead agency

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	finding. Work in the immediate area may only resume once the proper notifications have been made and/or additional mitigation measures have been identified to prevent additional injury or mortality.		
<b>MM-BIO-16-Tree Diseases, Pests, and Pathogens</b>	<p>The spread of invasive pests and diseases shall be mitigated by implementing the following:</p> <ol style="list-style-type: none"> <li>1) Prior to tree removal, a certified arborist shall evaluate trees for infectious tree diseases including but not limited to: <a href="#">sudden oak death</a> (<i>Phytophthora ramorum</i>), <a href="#">thousand canker fungus</a> (<i>Geosmithia morbida</i>), <a href="#">polyphagous shot hole borer</a> (<i>Euwallacea</i> spp.), and <a href="#">goldspotted oak borer</a> (<i>Agrilus auroguttatus</i>);</li> <li>2) If a certified arborist determines trees are impacted by infectious pests or diseases, the certified arborist shall prepare an Infectious Tree Disease Management Plan or develop a detailed, robust, enforceable, and feasible list of preventative measures. A plan/list shall provide measures relevant for each tree pest or disease observed. To avoid the spread of infectious tree pests and diseases, infected trees shall not be transported from a project area without first being treated using best available management practices described Infectious Tree Disease Management Plan or list of preventative measures.</li> <li>3) If possible, all tree material, especially infected tree material, shall be left on site. The material could be chipped for use as ground cover or mulch. Pruning and power tools shall be cleaned and disinfected before use to prevent introducing pathogens from known infested areas, and after use to prevent spread of pathogens to new areas.</li> </ol>	Prior to/During project construction activities	Project-level lead agency
<b>REC-1-Impacts on Streams</b>	CDFW's issuance of an LSA Agreement for 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 CEQA document from a lead agency for a project. To minimize additional requirements by CDFW pursuant to Fish and	Prior to issuance of development /grading permits	Project-level lead agency

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	Game Code section 1600 <i>et seq.</i> and/or under CEQA, the CEQA 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.		
<b>REC-2-Water Diversion</b>	CDFW recommends project-level lead agencies/applicants provide a copy of the basis of water right (water right permit) by State Water Resources Control Board that authorizes the beneficial use of stormwater or dry weather flows diverted from streams. This information along with the LSA Notification would assist CDFW in assessing the need for an LSA Agreement. CDFW recommends including documentation of water rights in a project-level CEQA document to ensure project budgets and timelines consider CDFW's regulatory process in the implementation of projects under the 2020 LA River Master Plan.	Preparation of project-level CEQA document/ LSA Notification	Project-level lead agency
<b>REC-3-Impacts on Anadromous Fish Habitat and Passage</b>	CDFW recommends that individual subsequent projects make a concerted effort to create habitat and design a channel that could support multiple life stages and life history strategies exhibited by southern California steelhead. Essential habitat components should be provided, including refugia to allow fish to withstand high flows, soft-bottom spawning areas to bury eggs, and restoration of riffle/pool complexes. A project should consider waters and substrate necessary to southern California steelhead for spawning, breeding, feeding, or growth to maturity. Floodplain connectivity is also important for restoration of critical spawning and rearing habitats.	Preparation of project-level CEQA document/ prior to finalizing project-level CEQA document	Project-level lead agency
<b>REC-4-Impacts on Anadromous Fish Habitat and Passage</b>	CDFW recommends LACPW include a section in Appendix B that would provide general design guidelines for creating habitat elements suitable for southern California steelhead. CDFW recommends the following sources for guidance in finalizing the PEIR and preparation of project-level CEQA documents with respect to fish habitat: <a href="#">Los Angeles River Ecosystem Restoration Integrated Feasibility Report</a> , <a href="#">Southern California Steelhead Recovery Plan</a> , <a href="#">Los Angeles River Environmental Flows Project</a> ,	Prior to finalizing PEIR/Preparation of project-level CEQA document/	LACPW/project-level lead agency

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	<a href="#">The Los Angeles River Fish Passage &amp; Habitat Structures Design Project</a> , the <a href="#">State Wildlife Action Plan 2015</a> , Chapters 5.5 and 6, and the <a href="#">California Salmonid Stream Habitat Restoration Manual</a> , 4 <sup>th</sup> edition, Volume I and II.		
<b>REC-5-Impacts on Wildlife and Wildlife Dispersal</b>	The 2020 LA River Master Plan should include a section in Appendix B that would provide design guidelines for wildlife friendly and permeable fencing. Mitigation Measure BIO-23, <i>Maintain Connectivity in Subsequent Project Design, Construction, and Operation</i> , shall be amended to reference those design guidelines.	Prior to finalizing PEIR	LACPW
<b>REC-6-Rare Plant Surveys</b>	CDFW recommends LACPW amend Mitigation Measure BIO-1 to state: [...] will be assessed for candidate, sensitive, or special-status plants and/or wildlife, aquatic resources, sensitive natural communities, wildlife corridors or nurseries, biological resources protected by local ordinances policies, such as protected trees or other regulated biological resources, while identifying and mapping all vegetation communities and land-cover types (initial study). To determine presence/absence or accurately identifying rare plants, a qualified botanist shall conduct multiple rare plant surveys throughout the growing season for any given year. Surveys shall occur during the time of year when rare plants are more likely to be visually detectable. Rare plant surveys proceeding after a low water year should be supplemented with one or two additional rare plant surveys over a number of years depending on the rare plant species, annual weather patterns, and whether the project area was recently disturbed (e.g., fire).	Prior to finalizing PEIR/ Preparation of project-level CEQA document/ prior to finalizing project-level CEQA document	LACPW/project-level lead agency
<b>REC-7-Rodenticides</b>	CDFW recommends LACPW include second-generation anticoagulant rodenticides as a prohibited poison under Mitigation Measure BIO-17, <i>Prepare and Implement Pest Management Plan</i> .	Prior to finalizing PEIR /During/After project	LACPW/project-level lead agency
<b>REC-8-State Wildlife Action Plan</b>	CDFW recommends LACPW review the <a href="#">State Wildlife Action Plan (SWAP) 2015</a> and consider whether the Project could incorporate KOPs, modify mitigation measures, and/or include design	Prior to finalizing	LACPW/project-level lead agency

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	components that could dovetail with the SWAP. CDFW recommends LACPW consider Chapters 5.5 South Coast Province and Chapter 6 Anadromous Fish. Also, CDFW recommends the final PEIR refer to the SWAP 2015 so project-level planning is consistent with the objectives and recommendations in the SWAP 2015.	PEIR/Prior to finalizing/adopting project-level CEQA document	
<b>REC-9-Los Angeles Biodiversity Project</b>	CDFW recommends LACPW review the <a href="#">Draft 2020 Biodiversity Report</a> and consider whether the Project could incorporate KOPs, modify mitigation measures, and/or include design components that are consistent with the City's biodiversity work. Also, CDFW recommends the final PEIR refer to the Biodiversity Report so project-level planning is consistent with the objectives and recommendations in the Biodiversity Report.	Prior to finalizing PEIR/Prior to finalizing/adopting project-level CEQA document	LACPW/project-level lead agency
<b>REC-10-Funding</b>	CDFW grant programs fund projects that sustain, restore, and enhance California's fish, wildlife, plants, and their habitats. Please visit <a href="#">CDFW Grant Opportunities</a> for more information.	Project-level planning	LACPW/project-level lead agency
<b>REC-11-Data</b>	Project-level lead agencies should ensure sensitive and special status species data has been properly submitted to the <a href="#">California Natural Diversity Database</a> with all data fields applicable filled out. Confirmation of data submittal should be provided to CDFW.	Prior to finalizing/adopting project-level CEQA document	Project-level lead agency
<b>REC-12-Mitigation and Monitoring Reporting Plan</b>	LACPW should update the Project's proposed Biological Resources Mitigation Measures and condition the environmental document to include mitigation measures recommended in this letter. LACPW is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures.	Prior to finalizing PEIR	LACPW