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Mr. Eduardo Maguino
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**Subject: Los Angeles County Waterworks District 29 Priority Capital Deficiencies Improvements, Draft Environmental Impact Report, SCH #2017111032, Los Angeles County Department of Public Works, Los Angeles County**

Dear Mr. Maguino:

The California Department of Fish and Wildlife (CDFW) has reviewed the above-referenced Draft Environmental Impact Report (DEIR) from Los Angeles County Department of Public Works (LACDPW; Lead Agency) for the Los Angeles County Waterworks District 29 Priority Capital Deficiencies Improvements Project (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.

**Project Description and Summary**

**Objective:** The Project consists of several separate improvements to existing waterlines and water tanks and the construction of one new waterline. The objectives of the Project are to provide a more reliable water system for District 29 customers and complete critical water-system improvements. The proposed Project includes the following:

1) **Fernwood Tank Improvement** – Demolition of two 50,000-gallon water tanks and construction of one 200,000-gallon tank as replacement in the unincorporated area of Topanga;
2) **Upper Encinal Tank Improvement** – Demolition of one 70,000-gallon water tank and construction of one 225,000-gallon tank as replacement in the City of Malibu (Malibu);
3) **Pipeline Replacements** – Replacement of approximately 34,300 feet of existing underground water pipeline, ranging from 1.5 to 30 inches. New pipeline(s) will range from 8 inches to 18 inches;
4) **New Pipelines** – Construction of approximately 6,300 feet of new underground 12-inch pipeline in Malibu; and,
5) **Creek Crossing Repairs** – Repairing several creek crossing locations by replacing and recoating segments of pipe and air release valves along Pacific Coast Highway (PCH). The pipeline segments would be constructed underground in existing Malibu, Los Angeles County, and California Department of Transportation (Caltrans) roadways. All proposed creek repair work would be performed within the existing Caltrans right-of-way.

Vegetation may be trimmed or removed in order to access the improvement footprint. Riparian vegetation may be trimmed during Creek Crossing Repairs.

**Location:** The Project is located in southwestern Los Angeles County. District 29's water service area consists of Malibu and the unincorporated area of Topanga. The Fernwood Tank Improvement is located at 19897 Horseshoe Drive in Topanga. The Upper Encinal Tank Improvement is located at the north of 4501 Vista Del Preseas in Malibu. Pipeline replacements are located at the following locations in Malibu: 3873 Carbon Canyon Road to 22576 Carbon Mesa Road; 18000 to 18303 Coastline Drive; 6480 Via Escondido Drive to 28734 PCH; 18808 to 18980 PCH; 21150 to 21434 PCH; and 21746 to 22716 PCH. New pipelines would be constructed at the following locations in Malibu: 3525 to 4400 Encinal Canyon Road and 19562 to 19742 PCH (end of Vista Del Preseas Road). Creek crossing repairs are located at the following tributaries: Zuma Creek, Escondido Creek, Corral Canyon Creek, Coal (Carbon) Canyon Creek, Los Flores Canyon Creek, Pena Canyon Creek, and Topanga Canyon Creek.

**Comments and Recommendations**

CDFW offers the comments and recommendations below to assist LACDPW in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions are also be included to improve the environmental document. 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 to Aquatic and Riparian Resources; Lake and Streambed Alteration (LSA) Agreement**

**Issue:** CDFW is concerned that the Project may impact streams and riparian vegetation.

**Specific impacts:** The Project's Jurisdictional Delineation Report in Appendix C-2 identified 14 streams potentially subject to CDFW jurisdiction. According to Table 4 on page 4-5 of the Jurisdictional Delineation Report, 2.54 acres (2,920 linear feet) of streambed and riparian resources occur within the jurisdictional survey area.

**Why impacts would occur:** Project construction and activities could result in temporary or permanent impacts to streams. Vegetation removal to facilitate access improvement footprints for Creek Crossing Repairs may increase sediment, debris, and pollutant input into a stream. The Project would require a foot crew to be present in streams for pipeline repairs, removals, or replacements. Foot, vehicle, and heavy equipment may trample vegetation, cause streambed erosion, or degrade, compact, or denude soils adjacent to or within a stream. Erosion may be more likely where Project construction and activities occur in areas burned by the 2018 Woolsey Fire. Excess sediment may be transported downstream and impair waterbodies. This may impact special status plants, wildlife, or fish species directly or indirectly through habitat modifications or habitat loss.

**Evidence impact would be significant:** The Project may impact streams, which absent specific mitigation, could result in substantial erosion or siltation on site or downstream of the Project.

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

**Mitigation Measure #1:** The Project may result in the alteration of streams. For any such activities, the Project applicant (or "entity") must provide notification to CDFW pursuant to Fish and Game Code, section 1600 *et seq*. Based on this notification and other information, CDFW determines whether a Lake and Streambed Alteration (LSA) Agreement with the applicant is required prior to conducting the proposed activities. Please visit CDFW's Lake and Streambed Alteration Program webpage to for information about LSA Notification and online submittal through the Environmental Permit Information Management System (EPIMS) Permitting Portal (CDFW 2020a).

LSA Notification should occur prior to Project ground-disturbing activities related to the following improvements: Carbon Canyon Road and Carbon Mesa Road Waterline Improvements; Creek Crossing Repairs; PCH and Topanga Beach Drive Waterline Improvements; and Las Virgenes Connection.

**Mitigation Measure #2:** Where Project staging areas occur adjacent to a stream (e.g., Topanga County Beach Staging), CDFW recommends LACDPW establish appropriate setbacks from the stream and demarcate the staging area. A setback should provide a buffer between the stream and staging area so that accidental spillage of pesticides, oil, gasoline, and other liquids within the staging area would not pass into streams. All staging should be within the designated staging area only.

**Mitigation Measure #3:** CDFW recommends that Creek Crossing Repair improvements be performed/completed in as few consecutive days as possible to avoid prolonged disturbance to aquatic wildlife and waterfowl.

**Mitigation Measure #4:** CDFW recommends the LSA Notification include a hydrology report to evaluate both above and below ground sections of any pipeline that would cross streams and concrete lined channels. The hydrology report should also include a scour analysis to demonstrate that stream banks and stream bed would not erode.

**Mitigation Measure #5:** As part of the LSA Notification process, CDFW requests a map showing features potentially subject to CDFW's broad regulatory authority over streams. CDFW also requests a hydrological evaluation of the 200, 100, 50, 25, 10, 5, and 2-year frequency storm event for existing and proposed conditions.

**Mitigation Measure #6:** LACDWP should update its table of impacts on riparian habitat and sensitive vegetation communities prior to LSA Notification [see Comment #6 (Impacts to Sensitive Vegetation Communities)].

**Recommendation:** CDFW's issuance of an 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 CEQA document from LACDPW for the 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.

Any LSA Agreement issued for the Project by CDFW may include additional measures protective of streambeds on and downstream of the Project site. The LSA Agreement may include further erosion and pollution control measures. To compensate for any on- and off-site impacts to riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: avoidance of resources, on- or off-site habitat creation, enhancement or restoration, and/or protection, and management of mitigation lands in perpetuity.

**Comment #2: Impacts to Special Status Fish**

**Issue:** The following species of fish occur within the Project site: southern California Distinct Population Segment of steelhead trout (*Oncorhynchus mykiss*; steelhead), tidewater goby (*Eucyclogobius newberryi*), and arroyo chub (*Gila orcuttii*). The steelhead trout and tidewater goby are Endangered Species Act (ESA)-listed endangered species. The arroyo chub is a California Species of Special Concern (SSC).

**Specific impacts:** Project construction and activities, directly or through habitat modification, may result in direct injury or mortality, reduced reproductive capacity, population declines, or local extirpation of ESA-listed fish species or SSC.

**Why impacts would occur:** The Project site contains habitat for steelhead, tidewater goby, and arroyo chub. According to the DEIR, steelhead are known to occur in Topanga Creek and Malibu Creek. Escondido Creek, Corral Canyon Creek, and Las Flores Canyon Creek provide habitat for steelhead. Tidewater goby has a high potential to occur in Malibu Lagoon or Topanga

Creek. The DEIR also states that arroyo chub has a high potential to occur in Malibu Lagoon/Malibu Creek. Lastly, the DEIR states that all three fish species may be present in other streams and brackish waters within the Project site.

Given the high potential for special status fish species to occur, the Project may impact fish directly or through habitat modification. The Project proposes to work only when streams are dry; however, some of the streams (e.g., Zuma Creek and Topanga Creek) and waterbodies supporting tidewater goby flow year-round. Work occurring in these areas could impact fish. Crews working in streams may cause stream bank erosion, potentially resulting in crushing, burying, smothering, or displacing fish, fish fry, nesting burrows, and eggs, or microscopic flora and fauna food sources for fish and fry. Excessive sedimentation may degrade substrate and water conditions needed for reproduction, potentially causing reduced reproductive capacity and success (Reiser and White 1988; Thompson and Larson 2004; USFWS 2005; Jensen at al. 2009). The Project may require vegetation removal along stream banks, potentially resulting in additional stream bank erosion. While dewatering is not expected to occur for any Project-related improvements, the DEIR states that dewatering may ultimately be needed. Subsequently, flow regime changes or changes to the streambed composition may affect the viability and reproductive capacity of special status fish that persist in the affected streams/watershed.

**Evidence impacts would be significant:** The Project has not proposed specific measures to fully avoid impacts to ESA-listed native fish species and SSC. Project construction and activities, directly or through habitat modification, may result in direct mortality or injury and reduced reproductive capacity of a threatened or endangered fish. CEQA provides protection not only for ESA-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, § 15065). Take of SSC could require a mandatory finding of significance by the LACDPW (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 or U.S. Fish and Wildlife Service (USFWS).

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

**Mitigation Measure #1:** CDFW recommends that the Project be conditioned to fully avoid all impacts to steelhead, tidewater goby, and arroyo chub. No work should occur in the stream channel or stream banks adjacent to streams supporting special status fish species. If work must occur in the stream channel or stream banks, no work should occur during the winter rainy season which typically occurs between December 1 through March 31 in southern California's Mediterranean climate (NMFS 2011). Additionally, no work should occur during the combined rainy season and breeding season(s) (depending on the species potentially impacted):

- *Steelhead*: No work should occur during periods of high flow and when steelhead smolt are likely to be in the area during periods of receding flows from November 1 through June 15.
- *Tidewater goby*: No work should occur during peak breeding activities from April 1 through June 31.

- *Arroyo chub*: No work should occur from February 1 through August 31 (Tres 1992).

**Mitigation Measure #2:** If the Project cannot feasibly avoid impacts, including dewatering activities, to steelhead, tidewater goby, or arroyo chub over the life of the Project, LACDPW should consult with CDFW, USFWS, and the National Marine Fisheries Service (NMFS). Consultation should occur prior to the start of any Project-related construction and activities where there may be impacts to these native fish species.

Take under the federal ESA is more broadly defined than CESA; take under ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS, in order to comply with ESA, is advised well in advance of any Project-related ground-disturbing activities where impacts to special status fish will occur.

**Mitigation Measure #3:** CDFW recommends LACDPW, in consultation with a qualified aquatic biologist, survey areas that could support steelhead, tidewater goby, and arroyo chub. Surveys should be conducted one year prior to the start of any Project-related construction and activities where there may be impacts to steelhead, tidewater goby, and arroyo chub. Depending on survey results, the qualified biologist should develop additional species and location-specific mitigation measures that would fully avoid impacts to these species. Positive detections of steelhead, tidewater goby, and arroyo chub should be reported to CDFW/USFWS.

**Mitigation Measure #4:** CDFW recommends that LACDPW implement a decontamination plan between streams. Decontamination could prevent the spread of potential aquatic invasive species within the watershed. New Zealand Mudsnails (*Potamopyrgus antipodarum*) is documented in Malibu Creek and Corral Canyon Creek (USGS 2020). All work boots, equipment, and tools should be brushed with a stiff brush after exiting a stream but prior to entering a different stream or waterbody. Decontamination measures should be consistent with the standards detailed in the CDFW Aquatic Invasive Species Decontamination Protocol (CDFW 2012).

**Comment #3: Impacts to Raptors**

**Issue:** CDFW is concerned that the Project may impact breeding and nesting white-tailed kites (*Elanus leucurus*) and/or American peregrine falcon (*Falco peregrinus anatum*). Both raptors are California Fully Protected species.

**Specific impacts:** Project construction and activities during the raptor breeding and nesting season could result in the incidental loss of fertile eggs or nestlings.

**Why impacts would occur:** Table 7 on page 3-25 of Appendix C-2 states that there is a moderate potential for white-tailed kite to occur and nest within the biological study area. These areas include Zuma Creek; Penya Canon Creek; Las Virgenes Connection; PCH 8-inch Waterline Improvements; and Carbon Canyon Road and Carbon Mesa Road. Regarding American peregrine falcon, Table 7 also states, “moderate potential to occur within the [biological study area] at creek banks, ledges, or structures.” Impacts to breeding and nesting raptors could result from Project ground-disturbing and vegetation removal activities. Construction during the breeding and nesting season of raptors could result in the incidental

loss of breeding success or otherwise lead to nest abandonment or reduced feeding, causing the incidental loss of fertile eggs or nestlings.

**Evidence impact would be significant:** The Project may result in adverse effects, either directly or through habitat modifications, on a California Fully Protect 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).

Additionally, nests of all birds and raptors are protected under State laws and regulations, including Fish and Game Code, sections 3503 and 3503.5. It is unlawful to take, possess, or needlessly destroy the nest or eggs of any raptor. Take or possession of migratory nongame birds designated in the Federal Migratory Bird Treaty Act of 1918 (Code of Federal Regulations, Title 50, § 10.13) is prohibited under Fish and Game Code section 3513. The reduction in the number of rare raptor species would constitute a significant impact absent appropriate mitigation. Adverse impacts to white-tailed kite and American peregrine falcon may occur because the Project is not conditioned to implement any raptor take avoidance surveys or fully avoid impacts to raptors.

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

**Mitigation Measure #1:** To protect potential nesting white-tailed kites and American peregrine falcons, CDFW recommends that a qualified biologist with knowledge of white-tailed kite and American peregrine falcon life history and survey experience conduct a thorough survey of all suitable nesting sites at locations including (but not limited to) the following: Zuma Creek; Penya Canon Creek; Las Virgenes Connection; PCH 8-inch Waterline Improvements; and Carbon Canyon Road and Carbon Mesa Road. Surveys should be completed no more than 3 days prior to the beginning of any Project-related ground-disturbing activities where white-tailed kite and American peregrine falcon could breed and nest. Surveys should be conducted in the immediate work/disturbance area plus a 500-foot buffer. Positive detections should be reported to CDFW prior to the any Project-related ground-disturbing activities.

**Mitigation Measure #2:** If white-tailed kite and/or American peregrine falcon nests are detected, CDFW strongly recommends that no Project-related construction and activities occur from January 1 through August 31.

**Mitigation Measure #3:** If Project-related construction and activities must occur between January 1 through August 31, CDFW recommends that a minimum 0.5-mile no-disturbance buffer be implemented around each raptor nest. No Project-related construction and activities should occur within the protected area while occupied by raptor nests and nestlings. This includes equipment staging, mobilization, and stockpiling of any materials. Any activities that would increase noise disturbances, human activity, dust, ground disturbance, and vibrations should be prohibited. LACDPW, in consultation with a qualified biologist, should develop a robust buffer and demarcation plan. The plan should include effective, specific, enforceable, and feasible measures. LACDPW should be responsible for maintaining protective fencing. Buffers should be maintained until the breeding season has ended or until a qualified biologist has determined that nestlings have fledged and are no longer reliant upon the nest or parental care

for survival. A qualified biologist should determine if buffers need to be increased to protect active nests.

**Mitigation Measure #4:** If there is a lapse in construction for more than 7 days from January 1 through August 31, a qualified biologist should repeat raptor surveys before work may restart.

**Comment #4: Impacts to California Species of Special Concern**

**Issue:** With the proposed mitigation measures identified in the DEIR, the Project may still result in significant impacts to the following SSC:

- *Reptiles and amphibians*: southern California legless lizard (*Anniella stebbinsi*), San Diegan tiger whiptail (*Aspidoscelis tigris stejnegeri*), southern western pond turtle (*Emys marmorata pallida*), coast horned lizard (*Phrynosoma blainvillii*). All species have a moderate potential to occur. The southern western pond turtle has a high potential to occur.
- San Diego desert woodrat (*Neotoma lepida intermedia*). The San Diego desert woodrat is present in the Project site.

**Specific impacts:** The Project may result in injury or mortality to SSC. The Project may indirectly impact SSC by causing the temporary or permanent loss of suitable habitat.

**Why impacts would occur:** The Project could result in direct or indirect impacts to SSC absent appropriate mitigation. Direct impacts to SSC could result from Project ground-disturbing (e.g., equipment staging, mobilization, demolition, and grading) and vegetation removal activities. Ground-disturbing activities may trap wildlife hiding under refugia and burrows. Wildlife could be trampled or crushed by construction equipment, vehicles, and foot traffic. This can result in injury or death of adults, juveniles, eggs, or hatchlings. Additionally, the Project may impact native vegetation supporting essential foraging and breeding habitat for SSC.

**Evidence impact would be significant:** Project construction and activities, directly or through habitat modification, may result in direct mortality, reduced reproductive capacity, population declines, or local extirpation of SSC. CEQA provides protection not only for ESA- and 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, § 15065). Take of SSC could require a mandatory finding of significance by the LACDPW (CEQA Guidelines, § 15065).

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

**Mitigation Measure #1: Scientific Collecting Permit** – LACDPW/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. 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). Please visit CDFW's Scientific Collection Permits webpage for information (CDFW 2020b).

Pursuant to the California Code of Regulations, title 14, section 650, LACDPW/qualified biologist must obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities. The LSA Agreement may provide similar take or possession of species as described in the conditions of the agreement [see Comment #1 (Impacts to Streams and Riparian Habitat; Lake and Streambed Alteration Agreement)].

**Mitigation Measure #2: Species Surveys** – LACDPW should retain a qualified biologist(s) with experience surveying for each of the following species: southern California legless lizard, San Diegan tiger whiptail, southern western pond turtle, coast horned lizard, and San Diego desert woodrat. The qualified biologist(s) should conduct species-specific and season appropriate surveys where suitable habitat occurs in the Project site. Surveys for Southern Western pond turtles and potential habitat should follow the United States Geological Survey's 2006 Western Pond Turtle Visual Survey Protocol for the Southcoast Ecoregion (USGS 2006). Positive detections of SSC and suitable habitat at the detection location should be mapped. These locations would help to develop more species-specific and location-specific mitigation measures. If SSC are detected, the qualified biologist should use visible flagging to mark the location where SSC was detected.

A summary report discussion survey results, including negative findings should be provided to LACDPW. Depending on the survey results, a qualified biologist should discuss potentially significant effects of the Project on SSC and include species specific mitigation measures to reduce impacts to below a level of significance (CEQA Guidelines, § 15125).

**Mitigation Measure #3: Protection/Relocation Plan** – Wildlife should be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to adjacent appropriate habitat within the open space on site or in suitable habitat adjacent to the project area (either way, at least 200 feet from the work area). Special status wildlife 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. The list (or plan) of protocols should be implemented during Project construction and activities/biological construction monitoring involving ground-disturbing activities and vegetation removal. The LACDPW/qualified biologist may consult with CDFW to prepare species-specific protocols for proper handling and relocation procedures. A relocation plan should be submitted to LACDPW prior to implementing any Project-related ground-disturbing activities, including staging, or stockpiling of equipment and materials, where there may be impacts to SSC.

**Mitigation Measure #4: Biological Monitoring** – Preconstruction surveys should be conducted no more than one week prior to initial Project-related ground-disturbing activities where there may be impacts to SSC. Afterwards, LACDPW should contract with a biologist to conduct periodic, but no less than weekly, biological monitoring to assist in avoiding and minimizing impacts to special-status wildlife. Daily biological monitoring should be conducted during any activities involving vegetation clearing or modification of natural habitat. Surveys for SSC should be conducted prior to the initiation of each day of vegetation removal activities in suitable habitat. Surveys for SSC should be conducted in the areas flagged in earlier surveys

before construction and activities may occur in or adjacent to those areas. Work may only occur in these areas after a qualified biologist has determined it is safe to do so. Even so, workers should be advised to work with caution near flagged areas. If SSC is encountered, a qualified biologist should safely protect or relocate the animal per relocation and handling protocols.

**Mitigation Measure #5: Injured or Dead Wildlife** – If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area should stop immediately, the qualified biologist should be notified, and dead or injured wildlife documented immediately. A formal report should be sent to CDFW and LACDPW within three calendar days of the incident or finding. The report should include the date, time of the finding or incident (if known), and location of the carcass or injured animal and circumstances of its death or injury (if known). Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death.

**Comment #5: Impacts to Rare Plants**

**Issue:** CDFW is concerned that the Project's proposed mitigation for rare plants (MM BIO-8: Plant Surveys) is insufficient to mitigate for impacts to rare plants, including ESA- and CESA-listed endangered and threatened species. The Project's proposed mitigation 1) defers to preconstruction surveys; 2) proposes relocation of rare plants; and 3) mitigation at a minimum of 1:1, possibly through payment of an in-lieu fee.

**Specific impacts:** The Project may result in population declines or local extirpation of rare plants, including ESA- and CESA-listed endangered and threatened species. The Project could impact at least 27 species of rare plants that include (but not limited to):

- *ESA-listed endangered*: Braunton's milkvetch (*Astragalus brauntonii*);
- *ESA-listed threatened*: canyon liveforever (*Dudleya cymosa* ssp. *agourensis*); Santa Monica mountains dudleya (*Dudleya cymosa* ssp. *ovatifolia*);
- *ESA and CESA-listed endangered*: Ventura marsh milkvetch (*Astragalus pycnostachyus* var. *lanosissimus*); coastal dunes milkvetch (*Astragalus tener* var. *titi*); San Fernando valley spineflower (*Chorizanthe parryi* var. *fernandina*); salt marsh bird's-beak (*Chloropyron maritimum* ssp. *maritimum*); Lyon's pentachaeta (*Pentachaeta lyonia*);
- California Rare Plant Rank (CRPR) 1B: Coulter's saltbush (*Atriplex coulteri*); Malibu baccharis (*Baccharis malibuensis*); Mesa horkelia (*Horkelia cuneata* var. *puberula*); decumbent goldenbush (*Isocoma menziesii* var. *decumbens*); white leaf monardella (*Monardella hypoleuca* ssp. *hypoleuca*); California tortula moss (*Tortula californica*);
- CRPR 2B: chaparral ragwort (*Senecio aphanactis*);
- CRPR 3: Lewis' evening-primerose (*Camissoniopsis lewisii*); south coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*); and,
- CRPR 4: red sand verbena (*Abronia maritima*); Brewer's calandrinia (*Calandrinia breweri*); Catalina mariposa lily (*Calochortus catalinae*); Plummer's mariposa lily (*Calochortus plummerae*); western dichondra (*Dichondra occidentalis*); southern California black walnut (*Juglans californica* var. *californica*); southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*); fragrant pitcher sage (*Lepechinia fragrans*); Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*); woolly seablite (*Suaeda taxifolia*).

**Why impacts would occur:** Project construction and activities involving ground disturbance and vegetation clearing, and vehicle, equipment, and foot traffic may bury, excavate, crush, trample, or disturb rare plants. Soil disturbance may result in permanent loss of rare plants and rare plant seed bank. Impacts to rare plants may result in local population declines or extirpation of a species. Insufficient mitigation may result in prolonged temporal or permanent impacts to a rare plant species range, distribution, and population in the State. The Project proposed Mitigation Measure BIO-8 to mitigate for potential impacts to rare plants; however, preconstruction surveys, relocation of rare plants, and payment of in-lieu fees may not mitigate for impacts to rare plants below a level of significance under CEQA.

First, preconstruction surveys may not detect rare plants if surveys are performed in the previous fall or winter. Moreover, rare plant abundance, density, and distribution may vary annually depending on the timing, duration, and amount of seasonal rainfall. Preconstruction surveys conducted during years of low rainfall inadequate to germinate a rare plant species may result in missed detection because of this variation. Also, multiple surveys are necessary to accurately capture where rare plants may occur. A single preconstruction survey may be insufficient to detect rare plants and determine population distribution. Project construction and activities proceeding after a false-negative preconstruction survey may result in irrevocable damage to a rare plant and seedbank.

Second, rare plant relocation should be considered experimental in nature and not be considered as a measure to mitigate for impacts to rare plants below a significant level under CEQA (Fiedler 1991; Fahselt 2007; Godefroid 2010). CDFW generally does not support the use of translocation, transplantation, or salvaging rare plants as the primary mitigation strategy for unavoidable impacts to rare plants. Studies have shown that these efforts are experimental and the outcome unreliable (CNPS 1998). Additionally, rare plants are habitat specialists that require specific habitat conditions to exist and persist. For example, they may require a particular soil type, set of pollinators, mycorrhizal fungi, associate plant species, and microclimate. Relocation of rare plants to an area not suitable to support the species may result in the mortality of rare plants and propagules. Furthermore, CDFW is concerned with translocating or moving collected seed to an undisclosed location. The biological implication of mixing genes and specific alleles into new areas is not supported by CDFW and may cause loss of both the transplanted species as well as the population they are being moved to/near.

Finally, LACDPW proposes mitigation at a minimum of 1:1 for impacts to rare plants, potentially through payment of in-lieu fees. The proposed replacement of 1:1 may by insufficient to mitigate for impacts to rare plants, especially species that are ESA- and CESA-listed endangered or threatened. The Project may impact species that are extremely rare within their range and are seriously threatened in the State. Replacement at 1:1 may be insufficient considering the species rarity, modifications or permanent loss of the seedbank, and uncertainties and often failures when creating or restoring rare plants and habitat that depend on complex and specific interactions between abiotic and biotic variables and physical processes (Fiedler 1991; Fahselt 2007; Godefroid 2010). Finally, it is unclear how in-lieu fees will be used for mitigation such that there is no net loss of rare plants and specific habitat meeting requirements of the rare plant species impacted. Moreover, it is unclear when in-lieu fees are collected and used for mitigation so there is no prolonged temporal loss of habitat.

**Evidence impact would be significant:** Plants with a CRPR of 1A, 1B, 2A, and 2B are rare throughout their range, endemic to California, and are seriously or moderately threatened in

California. All plants constituting CRPR 1A, 1B, 2A, and 2B meet the definitions of CESA and are eligible for State listing (CNPS 2020). Some CRPR 3 and 4 species meet the definitions of CESA. Depending on the species and ranking, a CRPR species may be seriously threatened in the State. California Native Plant Society's (CNPS) Rare Plant Ranks page includes additional rank definitions (CNPS 2020). Impacts to special status plants should be considered significant under CEQA unless they are clearly mitigated below a level of significance. 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 in local or regional plans, policies, or regulations, or by CDFW and/or USFWS.

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

**Mitigation Measure #1:** CDFW recommends that LACDWP retain a qualified botanist with experience surveying for southern California rare plants. A qualified botanist should conduct a rare plant survey for at least two survey seasons at the appropriate time of year prior to any Project-related ground-disturbance where there is suitable habitat for rare plants. Surveys should be performed according to CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018).

The qualified biologist should prepare a report to LACDPW, CDFW, and USFWS (if applicable), for review. At a minimum, the survey report should provide the following information:

a) A description and map of the survey areas. CDFW recommends the map show surveyor(s) track lines to document that the entire site was covered during field surveys.

b) Field survey conditions that should include name(s) of qualified botanists(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched.

c) If rare plants are detected, provide a map(s) showing the location of individual plants or populations, and number of plants or density of plants per square feet occurring at each location. Use appropriate symbology, text boxes, and other map elements to show and distinguish between species found and which plants/populations will be avoided versus impacted by Project construction and activities that would require mitigation.

d) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each rare plant or population is found. A sufficient description of biological conditions, primarily impacted habitat, should include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class, density, cover, and abundance of each species).

e) If rare plants are detected, the report/final environmental document should provide species-specific measures to fully avoid impacts to rare plants (see Mitigation Measure #2 and #4 below). For unavoidable Project impacts, provide species-specific measures to mitigate for impacts to rare plants and habitat (see Mitigation Measure #3, #5, and #6).

**Mitigation Measure #2:** If a CESA- or ESA-listed threatened or endangered rare plant species is detected, CDFW recommends LACDPW fully avoid impacts and notify CDFW and/or USFWS. CDFW recommends a qualified biologist develop a robust avoidance plan. The plan should include effective, specific, enforceable, and feasible measures. If CRPR 1, 2, 3, and 4 species are detected, CDFW recommends LACDPW fully avoid impacts and notify CDFW of CRPR 1 and 2 species.

**Mitigation Measure #3:** If the Project cannot feasibly avoid impacts to CESA- or ESA-listed threatened or endangered rare plants and habitat, either during Project activities or over the life of the Project, LACDPW must notify and consult with CDFW and/or USFWS.

**Mitigation Measure #4:** 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 the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 2080, 2085; Cal. Code Regs., tit. 14, § 786.9). Consequently, if the Project, Project construction, or any Project-related activity for the duration of the Project will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, CDFW recommends LACDPW seek appropriate take authorization under CESA prior to implementing the Project. Appropriate authorization from CDFW may include an Incidental Take Permit or a Consistency Determination in certain circumstances, among other options [Fish & G. Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to a Project and mitigation measures may be required to obtain a CESA Permit. 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 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 a CESA ITP.

**Mitigation Measure #5:** If the Project cannot feasibly avoid impacts to CRPR plants and habitat, either during Project activities or over the life of the Project, CDFW recommends the LACDPW compensate for the loss of individual plants and associated habitat acres by participation in a mitigation bank. The Project, and environmental document, should be conditioned to provide mitigation as follows: no less than 10:1 for CRPR 1 species; no less than 7:1 for CRPR 2 species; and, no less than 5:1 for CRPR 3 and 4 species. CDFW recommends that mitigation occur at a CDFW-approved mitigation bank or via an entity that has been approved to hold and manage mitigation lands. Mitigation credits should be purchased at no less than 10:1, 7:1, or 5:1 depending on the species impacted. Mitigation bank credits should be purchased, approved, or otherwise fully executed prior to any Project-related ground-disturbing activities where impacts will occur.

**Mitigation Measure #6:** If credits at a CDFW-approved mitigation bank are not available for mitigating impacts to rare plants and habitat, CDFW recommends setting aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands pursuant to Assembly Bill 1094 (2012), which amended Government Code sections 65965-65968. Under Government Code section 65967(c), 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.

Mitigation lands should be in the same watershed as the Project site and support habitat that contains the rare plant species impacted. The abundance of a rare plant species and total habitat acreage within the mitigation lands should be no less than 10:1, 7:1, or 5:1 depending on the species impacted. An appropriate non-wasting endowment should be provided for the long-term management of mitigation lands. A rare plant mitigation plan should include measures to protect the targeted habitat values in perpetuity from direct and indirect negative impacts. Issues that should be addressed include, but are not limited to, restrictions on access, proposed land dedications, control of illegal dumping, water pollution, and increased human intrusion. A conservation easement and endowment funds should be fully acquired, established, transferred, or otherwise executed prior to any Project-related ground-disturbing activities.

**Comment #6: Impacts to Sensitive Vegetation Communities and Natural Areas**

**Issue:** The DEIR uses the Holland ecosystem classification system to determine impacts on sensitive vegetation communities. By providing the Holland ecosystem classification, CDFW is unable to comment on impacts, alternatives to avoid impacts, as well as to assess the significance of the specific impact relative to the sensitive vegetation community.

**Specific impacts:** The Project will have at least 0.358 acres and 0.053 acres of temporary and permanent impacts, respectively, on sensitive vegetation communities including Southern Riparian Forest, Southern Sycamore Alder Riparian Woodland, and California Walnut Woodland, Southern Coast Live Oak Riparian Forest (Table 3.4-2, DEIR). The Project could impact sensitive vegetation communities not previously known to occur.

**Why impacts would occur:** The Project proposes to remove or cut back vegetation associated with sensitive vegetation communities. Temporary and permanent impacts to sensitive vegetation communities would occur at the following sites/improvements: Carbon Canyon Road and Carbon Mesa Road Waterline Improvements; Fernwood Tank Improvement; PCH and Topanga Beach Drive Waterline Improvements; Las Virgenes Connection; Zuma Creek; and Apple Field Lane Vacant Lot staging area. The name provided for each sensitive vegetation community impacted is based on the Holland ecosystem classification system. Since 2012, CDFW transitioned from using the Holland ecosystem classification system to using the State-wide accepted Manual of California Vegetation (MCV) alliance or association-based vegetation classification and mapping standard to track and rank sensitive vegetation communities (Sawyer et al. 2009). Since the DEIR uses Holland ecosystem classification, sensitive vegetation communities may be misidentified, resulting in potentially undisclosed Project impacts.

**Evidence impacts would be significant:** In 2007, the State Legislature required CDFW to develop and maintain a vegetation mapping standard for the State (Fish and G. Code, § 1940). This standard complies with the national vegetation classification system, which utilizes alliance and association-based classification of unique vegetation stands. CDFW only tracks sensitive vegetation communities and their respective state (S) rarity ranking using the MCV alliance and association names for vegetation communities. An S3 ranking indicates there are 21 to 100 occurrences of this community in existence in California; S2 has 6 to 20 occurrences; and S1 has less than 6 occurrences. CDFW considers natural communities with ranks of S1, S2, and S3 to be sensitive natural communities that meet the CEQA definition (CEQA Guidelines, §§

15380, 15063, 15065) and to be addressed in CEQA [CEQA Guidelines, § 15125(c)]. Many sensitive vegetation communities are associated with perennial or ephemeral sources of water, including groundwater depended ecosystems. These sensitive communities are deteriorating or have been significantly degraded at local, regional, and state levels. Without identifying the alliance/association vegetation community or their state ranking, the Project may impact sensitive vegetation communities or wildlife species that depend on these communities. The Project may result in substantial adverse direct effect on any S1, S2, or S3 sensitive vegetation communities.

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

**Mitigation Measure #1**: CDFW recommends that LACDPW, in consultation with a qualified botanist familiar with southern California vegetation communities, remap sensitive vegetation communities based on alliance/associated according to the Manual of California Vegetation, second edition (Sawyer et al. 2009) and California Natural Community List (CDFW 2020). LACDPW should disclose total acres of temporary and permeant impacts associated with each MCV alliance/association.

**Mitigation Measure #2:** The Project will impact sensitive vegetation communities. Therefore, CDFW recommends the Project mitigate for impacts as follows:

- A minimum of 10:1 for permanent and 7:1 for temporary impacts to S1 communities.
- A minimum of 7:1 for permanent and 5:1 for temporary impacts to S2 communities; and,
- A minimum of 5:1 for permanent and 3:1 for temporary impacts for S3 communities.

CDFW makes these recommendations based on factors that include (but not limited to) the rarity of the vegetation community in the State; local significance; potential rarity of specific plant species associated with each vegetation community; temporal loss of habitat; and the likelihood that the Project would impact communities associated with wetlands, streams, rivers, and creeks, which provide important food, nesting habitat, cover, and migration corridors for wildlife.

**Mitigation Measure #3:** Prior to any Project-related ground-disturbing activities where impacts to sensitive vegetation communities will occur, CDFW recommends that LACDPW, in consultation with a qualified botanist and restoration specialist, develop an ecosystem-based Habitat Mitigation and Monitoring Plan (HMMP) for impacts to sensitive vegetation communities. The HMMP should include the following components at a minimum:

a) A map and table showing location of impacts; number of plants impacted by species; acres of habitat impacted; and mitigation ratio applied; and

b) Vegetation community-specific measures for on- or off-site mitigation. Each vegetation community-specific mitigation measure, or robust restoration plan, should be of sufficient detail and resolution to describe the following at a minimum: a) Acres of vegetation community impacted and density, coverage, and abundance of associated vegetation species impacted by life form (i.e., grass, forb, shrub, subshrub, vine); b) Mitigation ratio applied and total number and/or area of replacement acres and vegetation; c) Location of restoration/mitigation areas and a discussion of the adequacy of the location(s) to serve as mitigation (e.g., would support the vegetation community impacted); d) Location

and assessment of appropriate reference site(s) to inform the appropriate planting rate to recreate the pre-project function, density, percent basal, canopy, and vegetation cover of community impacted; e) Scientific [Genus and species (subspecies/variety if applicable)] of all plants being used for restoration; f) Location(s) of propagule source from plants/trees of the same species (i.e., Genus, species, subspecies, and variety) as the species impacted, sourced from on-site or adjacent areas within the same watershed (not be purchased from a supplier); g) Species-specific planting methods (i.e., container or bulbs); h) Planting schedule; i) Measures to control exotic vegetation and protection from herbivory; j) Measurable goals and success criteria for establishing self-sustaining populations (e.g., percent survival rate, absolute cover); k) Contingency measures should success criteria not be met; l) Monitoring for a minimum of 5 years; m) Adaptive management techniques; and, n) Annual reporting criteria and requirements.

**Recommendation #1:** Prior to finalizing the environmental document, CDFW recommends LACDPW update sensitive vegetation community names per MCV alliance/association-based names and assign state rarity ranking to each vegetation community. LACDPW should mitigation for impacts to S1, S2, or S3 communities as described under Mitigation Measure #2. Table 3.4-2 in the DEIR should be updated to accurately disclose acres of temporary and permanent impacts associated with each MCV alliance/association. If LACDPW determines that a new significant environmental impact would result, LACDPW is required to recirculate the EIR [CEQA Guidelines, §15088.5(a)(1)]. CDFW recommends LACDPW recirculate the environmental document and Biological Report so CDFW may provide more specific comments on the Project's impacts on sensitive vegetation communities.

**Recommendation #2:** The Project proposes to revegetate constructed slopes with an erosion seed control mix. CDFW strongly advises against using a seed control mix, especially where a constructed slope occurs adjacent to an Environmentally Sensitive Habitat Area, Significant Ecological Area, Sensitive Environmental Resources Area, riparian habitat, and sensitive natural community. Seed mixes may contain invasive and non-native species that can spread into natural areas. Invasive plant species spread quickly and can displace native plants, prevent native plant growth, and create monocultures.

LACDPW should not plant, seed, or otherwise introduce invasive exotic plant species to areas that are adjacent to and/or near native habitat areas. CDFW strongly recommends avoiding all species that are rated 'Moderate' or 'High' by the California Invasive Species Council's Cal-IPC Inventory (Cal-IPC 2020a). Specially, CDFW recommends avoiding the following species: acacias (*Acacia* genus); tree-of-heaven (*Ailanthus altissima*); iceplant (*Carpobrotus* genus); pampas grass (*Cortederia* genus); fountain grass (*Pennisetum* genus); brooms (*Genista, Cytisus, Spartinum, Ulex*); tamarisk (*Tamarix* genus); periwinkle (*Vinca* genus), and any type of ivy. These species can quickly spread into natural areas.

Instead, CDFW recommends LACDPW revegetate with southern California native plants that are appropriate for the area being landscaped. CDFW recommends using native, locally appropriate plant species and drought tolerant, lawn grass alternatives to reduce water consumption. Information on alternatives for invasive, non-native, or landscaping plants may be found on the California Invasive Plant Council's, Don't Plant a Pest webpage (Cal-IPC 2020b). If LACDPW must use a seed mix, CDFW recommends using weed-free locally appropriate seed mixes. See Preventing the Spread of Invasive Plants for Transportation and Utility Corridors for additional guidance and Best Management Practices for using seed mixes (Cal-IPC 2012).

**Comment #7: Impacts to Bats**

**Issue:** Additional mitigation measures may be necessary in order to adequately avoid or minimize the mortality of western mastiff bat (*Eumops perotis californicus*) and western red bat (*Lasiurus blossevillii*). Both bat species are Species of Special Concern.

**Specific impacts:** The Project may result in direct and indirect impacts to bats. Direct impacts include removal of trees, vegetation, and/or structures that may provide roosting habitat and therefore has the potential for the direct loss of bats. Indirect impacts to bats and roosts could result from increased noise disturbances, human activity, dust, vegetation clearing, ground-disturbing activities (e.g., staging, access, grading, excavating, drilling), and vibrations caused by heavy equipment.

**Why impacts would occur:** In urbanized areas, bats use trees and man-made structures for daytime and nighttime roosts (Avila-Flores and Fenton 2005; Oprea et al. 2009; Remington and Cooper 2014). Trees and crevices in buildings in and adjacent to the Project could provide roosting habitat for bats. Bats can fit into very small seams, as small as a ¼ inch. Modifications to roost sites can have significant impacts on the bats' usability of the roost and can impact the bats' fitness and survivability (Johnston et al. 2004). Extra noise, vibration, or the reconfiguration of large objects can lead to the disturbance of roosting bats which may have a negative impact on the animals. Human disturbance can also lead to a change in humidity, temperatures, or the approach to a roost that could force the animals to change their mode of egress and/or ingress to a roost. Although temporary, such disturbance can lead to the abandonment of a maternity roost (Johnston et al. 2004).

**Evidence impact would be significant:** 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). Several bat species are considered California Species of Special Concern and meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15065). Take of SSC could require a mandatory finding of significance by the Lead Agency (CEQA Guidelines, § 15065).

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

**Mitigation Measure #1:** Where the Project-related implementation, construction, and activities would occur near potential roosting habitat for bats, CDFW recommends a qualified bat specialist conduct bat surveys within these areas (plus a 100-foot buffer as access allows) in order to identify potential habitat that could provide daytime and/or nighttime roost sites, and any maternity roosts. CDFW recommends using acoustic recognition technology to maximize detection of bats. A discussion of survey results, including negative findings should be provided to LACDPW. Depending on the survey results, a qualified bat specialist should discuss potentially significant effects of the Project on bats and include species specific mitigation measures to reduce impacts to below a level of significance (CEQA Guidelines, § 15125). Surveys and reporting by a qualified bat specialist should be conducted prior to any Project-related ground-disturbing activities at locations near potential roosting habitat for bats.

**Mitigation Measure #2:** If bats are not detected, but the bat specialist determines that roosting bats may be present at any time of year and could roost in trees at a given location, during Project-related tree removal, trees should be pushed down using heavy machinery rather than

felling with a chainsaw. To ensure the optimum warning for any roosting bats that may still be present, trees should be pushed lightly two or three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The tree should then be pushed to the ground slowly and remain in place until it is inspected by a bat specialist. Trees that are known to be bat roosts should not be bucked or mulched immediately. A period of at least 24 hours, and preferable 48 hours, should elapse prior to such operations to allow bats to escape.

**Mitigation Measure #3:** If maternity roosts are found, to the extent feasible, work should be scheduled between October 1 and February 28, outside of the maternity roosting season when young bats are present but are yet ready to fly out of the roost (March 1 to September 30).

**Mitigation Measure #4:** If maternity roosts are found and LACDPW determines that impacts are unavoidable, a qualified bat specialist should conduct a preconstruction survey to identify those trees or structures proposed for disturbance that could provide hibernacula or nursery colony roosting habitat. Acoustic recognition technology should be used to maximize the detection of bats. Each tree or structure identified as potentially supporting an active maternity roost should be closely inspected by the bat specialist no more than 7 days prior to tree/structure disturbance to determine the presence or absence of roost bats more precisely. If maternity roosts are detected, trees/structures determined to be maternity roosts should be left in place until the end of the maternity season. Work should not occur within 100 feet of or directly under or adjacent to an active roost. Work should also not occur between 30 minutes before subset and 30 minutes after sunrise.

**Additional Recommendations:**

Fencing. All Project-related exclusionary and protective fencing should not cause any injury or mortality to wildlife, birds, and raptors. CDFW recommends that fence installation adjacent to sensitive habitat areas be supervised by a qualified biologist. A qualified biologist should move any wildlife out of harm's way so that no wildlife is enclosed inside any work zone or otherwise impacted by fence installation. In coordination with a qualified biologist, LACDPW should install the fence in a manner that excludes any wildlife from entering the work zone (i.e., embedded fence such that wildlife cannot enter from under the fence). Fences should not have any slack that may cause wildlife entanglement. Fences should be constructed with materials that are not harmful to wildlife. Prohibited materials include, but are not limited to, spikes, glass, razor, or barbed wire. All hollow posts and pipes should be capped to prevent wildlife entrapment and mortality because these structures mimic the natural cavities preferred by various bird species and other wildlife for shelter, nesting, and roosting. Raptor's talons can become entrapped within the bolt holes of metal fence stakes resulting in mortality. Metal fence stakes used on the Project site should be plugged with bolts or other plugging materials to avoid this hazard.

LACDPW should be responsible for ensuring all perimeter controls are in place prior to commencing construction adjacent to sensitive habitat areas. The protection measures should be in place at the end of each working day and for the duration of the project. If determined necessary by a qualified biologist, the LACDPW should adjust the limits of the protection measures should they be inadequate to prevent wildlife from entering the work zone or exclude work/workers from entering sensitive habitat areas. LACDPW should consult and coordinate with a qualified biologist if protection measures need to be temporarily moved out of the way to facilitate construction, provided the protection measures are reinstalled promptly. LACDPW should ensure that project construction and activities remain within the Project footprint (i.e.,

outside the demarcated buffer) and that flagging/stakes/fencing are being maintained for the duration of the project.

Equipment Inspection. Before starting or moving construction vehicles, especially after a few days of nonoperation or a few hours on a hot day, operators should inspect under all vehicles and equipment to avoid impacts to any wildlife that may have sought refuge under equipment. All large building materials and pieces with crevices where wildlife can potentially hide should be inspected before moving. If wildlife is detected, a qualified biologist should move wildlife out of harm's way or temporarily stop activities until the animal leaves the area.

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 detected by completing and submitting CNDDB Field Survey Forms (CDFW 2020c). Species include (but not limited to) white-tailed kite, American peregrine falcon, CESA- and ESA-listed plants, and California Species of Special Concern. LACDPW should ensure the data has been properly submitted, with all data fields applicable filled out, prior to Project ground-disturbing activities. Where applicable, the data entry may need to list pending development as a threat and then update this occurrence after impacts have occurred. LACDPW should provide CDFW with confirmation of data submittal.

Mitigation Measures and Monitoring Reporting Plan. CDFW recommends that LACDPW 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 the LACDPW 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). LACDPW 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 the LACDPW 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). A final MMRP should reflect the Project's final on and/or off-site mitigation plans.

**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 the Los Angeles County Department of 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 the Los Angeles County Department of Public Works in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the Los Angeles County Department of 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

Sincerely,

DocuSigned by:
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B6E58CFE24724F5...

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
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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. A final MMRP shall reflect the Project's final on- and/or off-site mitigation plans.

| **Biological Resources (BIO)** | | | |
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| **Mitigation Measure (MM) or Recommendation (REC)** | | **Timing** | **Responsible Party** |
| **MM-BIO-1- Impacts to Streams – LSA Notification** | The LACDPW shall notify CDFW pursuant to Fish and Game Code, section 1600 *et seq*. prior to any Project ground disturbing activities related to the following improvements: related to the following improvements: Carbon Canyon Road and Carbon Mesa Road Waterline Improvements; Creek Crossing Repairs; PCH and Topanga Beach Drive Waterline Improvements; and Las Virgenes Connection. | Prior to Project construction and activities | Los Angeles County Department of Public Works (LACDPW) |
| **MM-BIO-2- Impacts to Streams – setbacks and staging areas** | Where Project staging areas occur adjacent to a stream, LACDPW shall establish appropriate setbacks from the stream and demarcate the staging area. A setback shall provide a buffer between the stream and staging area so that accidental spillage of pesticides, oil, gasoline, and other liquids within the staging area would not pass into streams. All staging shall be within the designated staging area only. | Prior to/During Project construction and activities | LACDPW |
| **MM-BIO-3- Impacts to Streams – setbacks and staging areas** | Creek Crossing Repair improvements shall be performed/completed in as few consecutive days as possible to avoid prolonged disturbance to aquatic wildlife and waterfowl. | During Project construction and activities | LACDPW |
| **MM-BIO-4- Impacts to Streams – LSA Notification** | Lake and Streambed Notification shall include a hydrology report to evaluate both above and below ground sections of any pipeline that would cross streams and concrete lined channels. The | Prior to Project construction and activities | LACDPW |

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| | hydrology report shall also include a scour analysis to demonstrate that stream banks and channel would not erode. | | |
| **MM-BIO-5- Impacts to Streams – LSA Notification** | As part of the LSA Notification process, LACDPW shall provide a map showing features potentially subject to CDFW's broad regulatory authority over streams. LACDPW shall also provide a hydrological evaluation of the 200, 100, 50, 25, 10, 5, and 2-year frequency storm event for existing and proposed conditions. | Prior to Project construction and activities | LACDPW |
| **MM-BIO-6- Impacts to Streams – LSA Notification** | LACDWP shall update its table of impacts on riparian habitat and sensitive vegetation communities prior to Notification. | Prior to Project construction and activities | LACDPW |
| **MM-BIO-7- Impacts to special status fish species - avoidance** | The Project shall fully avoid all impacts to steelhead, tidewater goby, and arroyo chub. No work shall occur in the stream channel or stream banks adjacent to streams supporting special status fish species. If work must occur in the stream channel or stream banks, no work shall occur during the winter rainy season which typically occurs between December 1 through March 31. Additionally, no work shall occur during combined rainy season and breeding season(s) (depending on the species potentially impacted):<br>• *Steelhead*: No work shall occur during periods of high flow and when steelhead smolt are likely to be in the area during periods of receding flows from November 1 through June 15).<br>• *Tidewater goby*: No work shall occur during peak breeding activities from April 1 through June 31.<br>• *Arroyo chub*: No work shall occur from February 1 through August 31 (Tres 1992). | Prior to/During Project construction and activities | LACDPW |
| **MM-BIO-8- Impacts to special status fish species - impacts** | If impacts to steelhead, tidewater goby, and arroyo chub cannot be avoided, including dewatering activities, LACDPW shall consult with CDFW, USFWS, and the National Marine Fisheries Service (NMFS). Consultation shall occur prior to the start of any Project-related construction and activities where there may be impacts to these native fish species. | Prior to Project construction and activities | LACDPW |

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| **MM-BIO-9- Impacts to special status fish species - surveys** | LACDPW, in consultation with a qualified aquatic biologist, shall survey areas that could support steelhead, tidewater goby, and arroyo chub. Surveys shall be conducted one year prior to the start of any Project-related construction and activities where there may be impacts to steelhead, tidewater goby, and arroyo chub. Depending on survey results, the qualified biologist shall develop additional species and location-specific mitigation measures that would fully avoid impacts to these species. Positive detections of steelhead, tidewater goby, and arroyo chub shall be reported to CDFW/USFWS. | Prior to Project construction and activities | LACDPW |
| **MM-BIO-10- Impacts to special status fish species – aquatic invasive species/decontamination** | LACDPW shall implement a decontamination plan between streams. Decontamination could prevent the spread of potential aquatic invasive species within the watershed such as New Zealand Mudsnails (*Potamopyrgus antipodarum*). All work boots, equipment, and tools shall be brushed with a stiff brush after exiting a stream but prior to entering a different stream or waterbody. Decontamination measures shall be consistent with the standards detailed in the CDFW Aquatic Invasive Species Decontamination Protocol. | Prior to/During Project construction and activities | LACDPW |
| **MM-BIO-11- Impacts to raptors – survey** | A qualified biologist with knowledge of white-tailed kite and American peregrine falcon life history and survey experience shall conduct a thorough survey of all suitable nesting sites at locations including (but not limited to) the following: Zuma Creek; Penya Canon Creek; Las Virgenes Connection; PCH 8-inch Waterline Improvements; and Carbon Canyon Road and Carbon Mesa Road. Surveys shall be completed no more than 3 days prior to the beginning of any Project-related ground-disturbing activities where white-tailed kite and American peregrine falcon could breed and nest. Surveys shall be conducted in the immediate work/disturbance area plus a 500-foot buffer. Positive detections shall be reported to CDFW prior to the any Project-related ground-disturbing activities. | Prior to Project construction and activities | LACDPW |

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| **MM-BIO-12- Impacts to raptors – avoidance** | If white-tailed kite and/or American peregrine falcon nests are detected, no Project-related construction and activities shall occur from January 1 through August 31. | Prior to Project construction and activities | LACDPW |
| **MM-BIO-13- Impacts to raptors – buffers** | If Project-related construction and activities must occur between January 1 through August 31, a minimum 0.5-mile no-disturbance buffer shall be implemented around each raptor nest. No Project-related construction and activities shall occur within the protected area while occupied by raptor nests and nestlings. This includes equipment staging, mobilization, and stockpiling of any materials. Any activities that would increase noise disturbances, human activity, dust, ground disturbance, and vibrations shall be prohibited. LACDPW, in consultation with a qualified biologist, shall develop a robust buffer and demarcation plan. LACDPW shall be responsible for maintaining protective fencing. Buffers shall be maintained until the breeding season has ended or until a qualified biologist has determined that nestlings have fledged and are no longer reliant upon the nest or parental care for survival. A qualified biologist shall determine if buffers need to be increased to protect active nests. | Prior to/During Project construction and activities | LACDPW |
| **MM-BIO-14- Impacts to raptors – surveys** | If there is a lapse in construction for more than 7 days from January 1 through August 31, a qualified biologist shall repeat raptor surveys before work may restart. | Prior to/During Project construction and activities | LACDPW |
| **MM-BIO-15- Impacts to Species of Special Concern – Scientific Collecting Permit** | LACDPW/qualified biologist shall obtain appropriate handling permits from CDFW in order to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities. | Prior to Project construction and activities | LACDPW |

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| **MM-BIO-16- Impacts to Species of Special Concern – surveys** | LACDPW shall retain a qualified biologist(s) with experience surveying for each of the following species: southern California legless lizard, San Diegan tiger whiptail, southern western pond turtle, coast horned lizard, and San Diego desert woodrat. The qualified biologist(s) shall conduct species-specific and season appropriate surveys where suitable habitat occurs in the Project site. Surveys for Southern Western pond turtles and potential habitat shall follow the United States Geological Survey's 2006 Western Pond Turtle Visual Survey Protocol for the Southcoast Ecoregion. Positive detections of SSC and suitable habitat at the detection location shall be mapped. If SSC are detected, the qualified biologist shall use visible flagging to mark the location where SSC was detected.<br><br>A summary report discussion survey results, including negative findings shall be provided to LACDPW. Depending on the survey results, a qualified biologist shall discuss potentially significant effects of the Project on SSC and include species specific mitigation measures to reduce impacts to below a level of significance (CEQA Guidelines, § 15125). | Prior to Project construction and activities | LACDPW |
| **MM-BIO-17- Impacts to Species of Special Concern – protection and relocation plan** | Wildlife shall be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to adjacent appropriate habitat within the open space on site or in suitable habitat adjacent to the project area (either way, at least 200 feet from the work area). Special status wildlife shall be captured only by a qualified biologist with proper handling permits.<br><br>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. The list (or plan) of protocols shall be implemented during Project construction and activities/biological construction monitoring involving ground-disturbing activities and vegetation removal. The LACDPW/qualified biologist may consult with CDFW to prepare species-specific protocols for proper | Prior to Project construction and activities | LACDPW |

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| | handling and relocation procedures. A relocation plan shall be submitted to LACDPW prior to implementing any Project-related ground-disturbing activities, including staging, or stockpiling of equipment and materials, where there may be impacts to SSC. | | |
| **MM-BIO-18- Impacts to Species of Special Concern – biomonitoring** | Preconstruction surveys shall be conducted no more than one week prior to initial Project-related ground-disturbing activities where there may be impacts to SSC. Afterwards, LACDPW shall contract with a biologist to conduct periodic, but no less than weekly, biological monitoring to assist in avoiding and minimizing impacts to special-status wildlife. Daily biological monitoring shall be conducted during any activities involving vegetation clearing or modification of natural habitat. Surveys for SSC shall be conducted prior to the initiation of each day of vegetation removal activities in suitable habitat. Surveys for SSC shall be conducted in the areas flagged in earlier surveys before construction and activities may occur in or adjacent to those areas. Work may only occur in these areas after a qualified biologist has determined it is safe to do so. Even so, workers shall be advised to work with caution near flagged areas. If SSC is encountered, a qualified biologist shall safely protect or relocate the animal per relocation and handling protocols. | Prior to/During Project construction and activities | LACDPW |
| **MM-BIO-19- Impacts to Species of Special Concern – injured or dead wildlife** | If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area shall stop immediately, the qualified biologist shall be notified, and dead or injured wildlife documented immediately. The qualified biologist shall contact the CDFW and LACDPW by telephone by the end of the day, or at the beginning of the next working day if the agency office is closed. Additionally, a formal report shall be sent to CDFW and LACDPW within three calendar days of the incident or finding. The report shall include the date, time of the finding or incident (if known), and location of the carcass or injured animal and circumstances of its death or injury (if known). Work in the immediate area may only resume once the proper notifications have been made and | During Project construction and activities | LACDPW |

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| | additional mitigation measures have been identified to prevent additional injury or death. | | |
| **MM-BIO-20-Impacts to Rare Plants – survey** | LACDWP shall retain a qualified botanist with experience surveying for southern California rare plants. A qualified botanist shall conduct a rare plant survey for at least two survey seasons at the appropriate time of year prior to any Project-related ground-disturbance where there is suitable habitat for rare plants. Surveys shall be performed according to CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.<br><br>The qualified biologist shall prepare a report to LACDPW, CDFW, and USFWS (if applicable), for review. At a minimum, the survey report shall provide the following information:<br>a) A description and map of the survey areas. The map will show surveyor(s) track lines to document that the entire site was covered during field surveys.<br>b) Field survey conditions that shall include name(s) of qualified botanists(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched.<br>c) If rare plants are detected, maps(s) will be provided showing the location of individual plants or populations, and number of plants or density of plants per square feet occurring at each location.<br>d) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each rare plant or population is found. A sufficient description of biological conditions, primarily impacted habitat, shall include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class, density, cover, and | Prior to Project construction and activities | LACDPW |

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| | abundance of each species). | | |
| **MM-BIO-21- Impacts to Rare Plants – avoid** | If a CESA- or ESA-listed threatened or endangered rare plant species is detected, LACDPW shall fully avoid impacts and notify CDFW and/or USFWS. A qualified biologist shall develop a robust avoidance plan. If a CRPR 1, 2, 3, and 4 species is detected, LACDPW shall fully avoid impacts and notify CDFW of CRPR 1 and 2 species. | Prior to Project construction and activities | LACDPW |
| **MM-BIO-22- Impacts to Rare Plants – CESA ITP** | If the Project, Project construction, or any Project-related activity for the duration of the Project will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, LACDPW shall seek appropriate take authorization under CESA prior to implementing the Project. | Prior to Project construction and activities | LACDPW |
| **MM-BIO-23- Impacts to Rare Plants – impacts** | If there will be impacts to CESA- or ESA-listed threatened or endangered rare plants and habitat, either during Project activities or over the life of the Project, LACDPW will notify and consult with CDFW and/or USFWS. | Prior to Project construction and activities | LACDPW |
| **MM-BIO-24- Impacts to Rare Plants – replacement habitat** | If there are impacts to CRPR plants and habitat, LACDPW shall compensate for the loss of individual plants and associated habitat acres by participation in a mitigation bank. LACDPW shall provide mitigation as follows: no less than 10:1 for CRPR 1 species; no less than 7:1 for CRPR 2 species; and no less than 5:1 for CRPR 3 and 4 species. Mitigation shall occur at a CDFW-approved mitigation bank or via an entity that has been approved to hold and manage mitigation lands. Mitigation credits shall be purchased at no less than 10:1, 7:1, or 5:1 depending on the species impacted. Mitigation bank credits shall be purchased, approved, or otherwise fully executed prior to any Project-related ground-disturbing activities where impacts will occur. | Prior to Project construction and activities | LACDPW |
| **MM-BIO-25- Impacts to Rare Plants – replacement habitat** | If credits at a CDFW-approved mitigation bank are not available for mitigating impacts to rare plants and habitat, LACDPW shall set aside replacement habitat to be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved to hold and manage mitigation lands. Mitigation lands shall be in the same | Prior to Project construction and activities | LACDPW |

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| | watershed as the Project site and support habitat that contains the rare plant species impacted. The abundance of a rare plant species and total habitat acreage within the mitigation lands shall be no less than 10:1, 7:1, or 5:1 depending on the species impacted. An appropriate non-wasting endowment shall be provided for the long-term management of mitigation lands. A rare plant mitigation plan shall include measures to protect the targeted habitat values in perpetuity from direct and indirect negative impacts. A conservation easement and endowment funds shall be fully acquired, established, transferred, or otherwise executed prior to any Project-related ground-disturbing activities. | | |
| **MM-BIO-26- Impacts to Sensitive Vegetation Communities - survey** | LACDPW, in consultation with a qualified botanist familiar with southern California vegetation communities, shall remap sensitive vegetation communities based on alliance/associated according to the Manual of California Vegetation and California Natural Community List. | Prior to Project construction and activities | LACDPW |
| **MM-BIO-27- Impacts to Sensitive Vegetation Communities – replacement habitat** | LACDPW shall mitigate for impacts as follows:<br>• A minimum of 10:1 for permanent and 7:1 for temporary impacts to S1 communities.<br>• A minimum of 7:1 for permanent and 5:1 for temporary impacts to S2 communities; and,<br>• A minimum of 5:1 for permanent and 3:1 for temporary impacts for S3 communities. | Prior to/After Project construction and activities | LACDPW |
| **MM-BIO-28- Impacts to Sensitive Vegetation Communities – HMMP** | Prior to any Project-related ground-disturbing activities where impacts to sensitive vegetation communities will occur, LACDPW, in consultation with a qualified botanist and restoration specialist, shall develop an ecosystem-based Habitat Mitigation and Monitoring Plan (HMMP). The HMMP shall include the following components at a minimum:<br>a) A map and table showing location of impacts; number of plants impacted by species; acres of habitat impacted; and mitigation ratio applied; and,<br>b) Vegetation community-specific measures for on- or off-site | Prior to Project construction and activities | LACDPW |

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| | mitigation. Each vegetation community-specific mitigation measure, or robust restoration plan, shall be of sufficient detail and resolution to describe the following at a minimum: a) Acres of vegetation community impacted and density, coverage, and abundance of associated vegetation species impacted by life form (i.e., grass, forb, shrub, subshrub, vine); b) Mitigation ratio applied and total number and/or area of replacement acres and vegetation; c) Location of restoration/mitigation areas and a discussion of the adequacy of the location(s) to serve as mitigation (e.g., would support the vegetation community impacted); d) Location and assessment of appropriate reference site(s) to inform the appropriate planting rate to recreate the pre-project function, density, percent basal, canopy, and vegetation cover of community impacted; e) Scientific [Genus and species (subspecies/variety if applicable)] of all plants being used for restoration; f) Location(s) of propagule source from plants/trees of the same species (i.e., Genus, species, subspecies, and variety) as the species impacted, sourced from on-site or adjacent areas within the same watershed (not be purchased from a supplier); g) Species-specific planting methods (i.e., container or bulbs); h) Planting schedule; i) Measures to control exotic vegetation and protection from herbivory; j) Measurable goals and success criteria for establishing self-sustaining populations (e.g., percent survival rate, absolute cover); k) Contingency measures should success criteria not be met; l) Monitoring for a minimum of 5 years; m) Adaptive management techniques; and, n) Annual reporting criteria and requirements. | | |
| **MM-BIO-29-Impacts to Bats – survey** | Where the Project-related implementation, construction, and activities would occur near potential roosting habitat for bats, a qualified bat specialist shall conduct bat surveys within these areas (plus a 100-foot buffer as access allows) in order to identify | Prior to Project construction and activities | LACDPW |

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| | potential habitat that could provide daytime and/or nighttime roost sites, and any maternity roosts. Acoustic recognition technology to shall be used to maximize detection of bats. A discussion of survey results, including negative findings shall be provided to LACDPW. Depending on the survey results, a qualified bat specialist shall discuss potentially significant effects of the Project on bats and include species specific mitigation measures to reduce impacts to below a level of significance. Surveys and reporting by a qualified bat specialist shall be conducted prior to any Project-related ground-disturbing activities at locations near potential roosting habitat for bats. | | |
| **MM-BIO-30- Impacts to Bats – tree removal** | If bats are not detected, but the bat specialist determines that roosting bats may be present at any time of year and could roost in trees at a given location, during Project-related tree removal, trees shall be pushed down using heavy machinery rather than felling with a chainsaw. To ensure the optimum warning for any roosting bats that may still be present, trees shall be pushed lightly two or three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The tree shall then be pushed to the ground slowly and remain in place until it is inspected by a bat specialist. Trees that are known to be bat roosts shall not be bucked or mulched immediately. A period of at least 24 hours, and preferable 48 hours, shall elapse prior to such operations to allow bats to escape. | During Project construction and activities | LACDPW |
| **MM-BIO-31- Impacts to Bats – maternity roosts** | If maternity roosts are found, to the extent feasible, work shall be scheduled between October 1 and February 28, outside of the maternity roosting season when young bats are present but are yet ready to fly out of the roost (March 1 to September 30). | Prior to/During Project construction and activities | LACDPW |
| **MM-BIO-32- Impacts to Bats – maternity roosts** | If maternity roosts are found and impacts are unavoidable, a qualified bat specialist shall conduct a preconstruction survey to identify those trees or structures proposed for disturbance that could provide hibernacula or nursery colony roosting habitat. Acoustic recognition technology shall be used to maximize the | Prior to/During Project construction and activities | LACDPW |

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| | detection of bats. Each tree or structure identified as potentially supporting an active maternity roost shall be closely inspected by the bat specialist no more than 7 days prior to tree/structure disturbance to determine the presence or absence of roost bats more precisely. If maternity roosts are detected, trees/structures determined to be maternity roosts shall be left in place until the end of the maternity season. Work shall not occur within 100 feet of or directly under or adjacent to an active roost. Work shall also not occur between 30 minutes before subset and 30 minutes after sunrise. | | |
| **REC-1-LSA Notification** | To minimize additional requirements by CDFW pursuant to Fish and Game Code, section 1600 *et seq*. and/or under CEQA, the Project's 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. | Prior to Project construction and activities | LACDPW |
| **REC-2-Sensitive Vegetation communities** | Prior to finalizing the environmental document, CDFW recommends LACDPW update sensitive vegetation community names per MCV alliance/association-based names and assign state rarity ranking to each vegetation community. LACDPW should mitigation for impacts to S1, S2, or S3 communities as described under **MM-BIO-27**. Table 3.4-2 in the DEIR should be updated to accurately disclose acres of temporary and permanent impacts associated with each MCV alliance/association. If LACDPW determines that a new significant environmental impact would result, LACDPW is required to recirculate the EIR [CEQA Guidelines, §15088.5(a)(1)]. CDFW recommends LACDPW recirculate the environmental document and Biological Report so CDFW may provide more specific comments on the Project's impacts on sensitive vegetation communities. | Prior to Project construction and activities | LACDPW |
| **REC-3-Sensitive Vegetation communities** | The Project proposes to revegetate constructed slopes with an erosion seed control mix. CDFW strongly advises against using a seed control mix, especially where a constructed slope occurs adjacent to an Environmental Sensitive Habitat Area, Significant | After Project construction and activities | LACDPW |

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| | Ecological Area, Sensitive Environmental Resources Area, riparian habitat, and sensitive natural community. Seed mixes may contain invasive and non-native species that can spread into natural areas. Invasive plants are a leading cause of native biodiversity loss. Invasive plant species spread quickly and can displace native plants, prevent native plant growth, and create monocultures.<br><br>LACDPW should not plant, seed, or otherwise introduce invasive exotic plant species to areas that are adjacent to and/or near native habitat areas. CDFW strongly recommends avoiding all species that are rated 'Moderate' or 'High' by the California Invasive Species Council's Cal-IPC Inventory. Specially, CDFW recommends avoiding the following species: acacias (*Acacia* genus); tree-of-heaven (*Ailanthus altissima*); iceplant (*Carpobrotus* genus); pampas grass (*Cortederia* genus); fountain grass (*Pennisetum* genus); Brooms (*Genista, Cytisus, Spartinum, Ulex*); tamarisk (*Tamarix* genus); periwinkle (*Vinca* genus), and any type of ivy. These species can quickly spread into natural areas. For example, Fountain grass is a common erosion control/landscaping plant in southern California. Fountain grass can quickly spread and displace native plants. In southern California, Fountain grass is rapidly invading steep west and south facing hillsides in western Santa Monica Mountains. Moreover, Fountain grass may increase fuel load and therefore the frequency, intensity, and spread of fire.<br><br>Instead, CDFW recommends LACDPW revegetate with southern California native plants that are appropriate for the area being landscaped. CDFW recommends using native, locally appropriate plant species and drought tolerant, lawn grass alternatives to reduce water consumption. Information on alternatives for invasive, non-native, or landscaping plants may be found on the California Invasive Plant Council's, Don't Plant a Pest webpage. If LACDPW must use a seed mix, CDFW recommends using weed-free locally appropriate seed mixes. See Preventing the Spread of Invasive | | |

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| | Plants for Transportation and Utility Corridors for additional guidance and Best Management Practices for using seed mixes. | | |
| **REC-4-Fencing** | All Project-related exclusionary and protective fencing should not cause any injury or mortality to wildlife, birds, and raptors. CDFW recommends that fence installation adjacent to sensitive habitat areas be supervised by a qualified biologist. A qualified biologist should move any wildlife out of harm's way so that no wildlife is enclosed inside any work zone or otherwise impacted by fence installation. In coordination with a qualified biologist, LACDPW should install the fence in a manner that excludes any wildlife from entering the work zone (i.e., embedded fence such that wildlife cannot enter from under the fence). Fences should not have any slack that may cause wildlife entanglement. Fences should be constructed with materials that are not harmful to wildlife. Prohibited materials include, but are not limited to, spikes, glass, razor, or barbed wire. All hollow posts and pipes should be capped to prevent wildlife entrapment and mortality because these structures mimic the natural cavities preferred by various bird species and other wildlife for shelter, nesting, and roosting. Raptor's talons can become entrapped within the bolt holes of metal fence stakes resulting in mortality. Metal fence stakes used on the Project site should be plugged with bolts or other plugging materials to avoid this hazard.<br><br>LACDPW should be responsible for ensuring all perimeter controls are in place prior to commencing construction adjacent to sensitive habitat areas. The protection measures should be in place at the end of each working day and for the duration of the project. If determined necessary by a qualified biologist, the LACDPW should adjust the limits of the protection measures should they be inadequate to prevent wildlife from entering the work zone or exclude work/workers from entering sensitive habitat areas. LACDPW should consult and coordinate with a qualified biologist if protection measures need to be temporarily moved out of the way | Prior to/During Project construction and activities | LACDPW |

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| | to facilitate construction, provided the protection measures are reinstalled promptly. LACDPW should ensure that project construction and activities remain within the Project footprint (i.e., outside the demarcated buffer) and that flagging/stakes/fencing are being maintained for the duration of the project. | | |
| **REC-5-Equipment Inspection** | Before starting or moving construction vehicles, especially after a few days of nonoperation or a few hours on a hot day, operators should inspect under all vehicles and equipment to avoid impacts to any wildlife that may have sought refuge under equipment. All large building materials and pieces with crevices where wildlife can potentially hide should be inspected before moving. If wildlife is detected, a qualified biologist should move wildlife out of harm's way or temporarily stop activities until the animal leaves the area. | Prior to/During Project construction and activities | LACDPW |
| **REC-6-Data** | Special status species detected should be reported to the California Natural Diversity Database (CNDDB) by completing and submitting CNDDB Field Survey Forms. Species include (but not limited to) white-tailed kite, American peregrine falcon, CESA- and ESA-listed plants, and California Species of Special Concern. LACDPW should ensure the data has been properly submitted, with all data fields applicable filled out, prior to Project ground-disturbing activities. Where applicable, the data entry may need to list pending development as a threat and then update this occurrence after impacts have occurred. LACDPW should provide CDFW with confirmation of data submittal. | Prior to/During Project construction and activities | LACDPW |
| **REC-7-Mitigation Measures and Monitoring Reporting Plan** | CDFW recommends that LACDPW update the Project's proposed Biological Resources Mitigation Measures and condition the environmental document to include mitigation measures recommended in this letter. LACDPW is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. A final MMRP should reflect the Project's final on and/or off-site mitigation plans. | Prior to Project construction and activities | LACDPW |