

State of California – Natural Resources Agency

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July 6, 2020

Governor's Office of Planning & Research

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**Jul 06 2020**

**STATE CLEARINGHOUSE**

**Subject: Draft Program Environmental Impact Report for the Los Cerritos Wetlands Restoration Plan, SCH # 2019039050, Los Angeles County**

Dear Ms. Gee:

The California Department of Fish and Wildlife (CDFW) has reviewed the above-referenced Draft Program Environmental Impact Report (DPEIR) for Los Cerritos Wetlands Restoration Plan (Program). The DPEIR's supporting documentation includes *Appendix C Biological Resources*.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Program that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Program 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, subd. (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 Program 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 Program proponent obtain appropriate authorization under the Fish and Game Code.

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## **Program Location**

The 503-acre Los Cerritos Wetlands Complex (LCWC) is located within the cities of Seal Beach (Orange County) and Long Beach (Los Angeles County). Three major channels are present in the LCWC: Los Cerritos Channel, San Gabriel River, and Haynes Cooling Channel. Steamshovel Slough, a remnant historic tidal channel, drains to the Los Cerritos Channel. The LCWC is managed under four main restoration Areas, North, Central, Isthmus, and South that are further divided into 17 smaller individual Areas.

## **Program Description and Objectives**

LCWA previously developed a Los Cerritos Wetlands Final Conceptual Restoration Plan, which was adopted by the LCWA Board of Directors in August 2015. The Los Cerritos Wetlands Final Conceptual Restoration Plan identified three restoration designs and provided an alternative analyses report for habitat enhancement and improved public access.

The Los Cerritos Wetland Authority (LCWA) is proposing to implement a restoration program for the 503-acre LCWC. The Program would restore wetland, transition, and upland habitats throughout LCWC. This would involve remediation of contaminated soil and groundwater, grading, revegetation, construction of new public access opportunities (trails, visitor center, parking lots, and viewpoints), construction of flood management facilities (earthen levees, berms, and walls), and modification of existing infrastructure and utilities. Program objectives include restoring tidal wetland processes and functions, maximizing contiguous habitat areas, buffering human disturbance, and creating public access and an interpretive program.

Implementation of the Program will occur in phases to accommodate existing and future potential changes in land ownership and usage, and as funding becomes available. The restoration activities would be phased over time as properties become available for acquisition by LCWA. A sequence of construction and activities are planned for near-term (within the next 10 years), mid-term (10-20 years), and long-term (20 years or more). For oil operations that do not have agreements in place with LCWA, it is expected that overall level of oil and natural gas production would continue until oil operators decide to stop production.

## **Environmental documents**

CDFW's review of the DPEIR evaluated additional biological resources information found in the following environmental documents: [Los Cerritos Wetlands Oil Consolidation and Restoration Project \(CRP\) EIR](#) (City of Long Beach 2017), [CRP EIR Restoration Plan](#) (Glenn Lukos Associates 2017), [CRP EIR Biological Resources \(Chapter 3.3\)](#) (Glenn Lukos Associates 2017), and [Los Cerritos Wetlands Habitat Assessment Report](#) (Tidal Influence 2012). These documents were referenced in the DPEIR and prepared for projects separate from this DPEIR.

## **COMMENTS AND RECOMMENDATIONS**

CDFW provided prior comments to the LCWA in the April 17, 2019 letter addressing the Notice of Preparation. We advocated for clarification and further analysis regarding existing biological resources, proposed mitigation, mitigation banking, and mineral rights.

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

## **SPECIFIC COMMENTS**

**Comment #1 - Mitigation bank:** The DPEIR should make clear, in text and planning maps, where the Northern Synergy Oil Field Site Mitigation Bank is located because it is part of the larger Program. CDFW shall negotiate the terms of the Mitigation Bank through the formal mitigation bank process; however, we encourage LCWA to minimize public access/anthropogenic disturbance within Mitigation Bank to the extent feasible.

**Comment #2 - Species surveys:** CDFW considers an environmental report as incomplete if species-specific surveys have not been performed, or additional surveys are necessary, as a basis for evaluating species presence/absence, identifying potential impacts, and proposing appropriate mitigation measures. Comment #3 recommends species-specific surveys still needed to complete the DPEIR.

The LCWA did not conduct surveys for sensitive plant and wildlife species prior to development of the DPEIR. The DPEIR proposes to conduct preconstruction surveys for sensitive wildlife and plant species such as bats and burrowing owls before implementing project-level activities under the Program. The use of preconstruction surveys without prior presence/absence surveys is not adequate for detection of CESA-listed and CEQA-rare species, per Fish and Game Code, section 2081 (b) and California Code of Regulations, sections 783.2-783.8. Additionally, the lack of species-specific surveys prevents full disclosure of potential Program-related impacts and prevents full analysis of those impacts in the DPEIR.

CDFW recommends the LCWA use species-specific protocol surveys to determine 1) presence/absence of sensitive species with a potential to occur in the Program Area and, 2) baseline population metrics (e.g., abundance, density, distribution) for sensitive species, both documented and could occur, in the Program Area. Focused surveys, conducted at the appropriate season and time of day when the sensitive species are active or otherwise identifiable, are recommended. Seasonal variations in species use of the Program Area should be addressed. CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Surveys should follow accepted scientific protocol and should be conducted by a qualified biologist, botanist, or species specialist with the appropriate experience.

CDFW recommends the LCWA conduct additional surveys, disclose results, (including negative findings), and recirculate the DPEIR so CDFW may review and provide meaningful avoidance, minimization, and mitigation measures. The Final Environmental document should include full analysis of impacts to the species listed under Comment #3 and proposed species-specific avoidance measures, and mitigation if impacts cannot be voided.

**Comment #3 - Wildlife:** CDFW recommends the LCWA conduct additional baseline surveys and further evaluate impacts to the following species and their habitat.

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**Bats:** The DPEIR states there are palm trees in all four Areas that may provide suitable bat roosting habitat for Western mastiff bat (*Eumops perotis*) and Western yellow bat (*Lasiurus xanthinus*). A review of CNDDDB found one record of big free-tailed bat (*Nyctinomops macrotis*) 5 miles from the Program Area. Big free-tailed bats may roost in holes in trees and buildings and forage over water sources for moths and other insects (Harris 2002). The conceptual design for restoring each Area suggests most of the trees will be removed to restore wetlands, therefore, if bats are using trees, there may be significant impacts. CDFW recommends a species-specific survey at the appropriate season and time of day to document any daytime, nighttime, and maternity roosting sites. Surveys should include acoustic recognition technology to maximize detection of bats.

**Belding's savannah sparrow (Belding's sparrow):** Belding's sparrows (*Passerculus sandwichensis beldingi*) are ecologically associated with dense pickleweed (*Salicornia* sp.), within which most nests are found (Zemba et al. 2006). Pickleweed occurs in all four Areas and much of this habitat may be impacted by landscape-level grading, excavating, and recontouring. This would reduce breeding habitat for Belding's sparrow until pickleweed reestablishes in restoration areas, which could take up to one to two years (Chapple and Dronova 2017; Mayer 1987). CDFW recommends the DPEIR include a discussion that evaluates, and a map that shows, where Belding's sparrow habitat could be avoided to the extent feasible, prioritizing areas of high nesting activity, and potentially implementing no-effect buffers around these areas. Preserving/avoiding only narrow bands of pickleweed near the transition zone is not a viable option because Belding's sparrow can be displaced from narrow bands of pickleweed by song sparrows (Zemba et al. 2006). In most instances, narrow habitat belts and edges near uplands and freshwater marsh are not occupied by Belding's sparrow (Zemba et al. 2006).

Belding's sparrow is CESA-listed; therefore, if direct or indirect impacts to Belding's sparrow cannot be avoided, an Incidental Take Permit (ITP) under CESA may be necessary prior to Program activities. CDFW recommends modifying Mitigation Measure BIO-3 to include a statement acknowledging that an ITP may be needed. CDFW concurs with the LCWA that a Belding's sparrow habitat Mitigation, Maintenance and Monitoring Program should be prepared, and recommends a Mitigation, Maintenance, and Monitoring Program be provided as an appendix in the DPEIR for review and commenting (also see *General Comments - Relying on future plans not adequate*). CDFW may recommend mitigating impacts to pickleweed habitat more than 1:1 offered in the DPEIR upon review of a Belding's sparrow habitat Mitigation, Maintenance, and Monitoring Program.

Belding's sparrows are sensitive to pedestrian and vehicle traffic. At the LCWC, an approaching distance of 3 meters (m) and 2.8 m during the pre-nesting and nesting season, respectively, alerted Belding's sparrow to take flight (Fernandez-Juricic et al. 2009). Nest abandonment could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. CDFW recommends the LCWA reevaluate proposed location and alignment of trails, viewpoints, visitor centers, and parking areas to minimize public access/anthropogenic disturbance near Belding's sparrow habitat, prioritizing areas of high nesting activity. A minimum approaching distance of 63 meters and buffer areas of 1.3 hectares around Belding's sparrow is recommended (Fernandez-Juricic et al. 2009). Many of the proposed trails, and the Seal Beach Visitor's Center, are

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less than 63 meters from Belding's sparrow habitat.

**Burrowing owl:** Burrowing owls (*Athene cunicularia*) and wintering habitat have been observed at the Callaway Marsh Site. It is unclear if a recent species-specific survey was conducted to determine if burrowing owls and wintering habitat occur in additional Areas in the LCWC. CDFW recommends a species-specific survey and identification of wintering habitat. All survey efforts should be conducted prior to any Program activities that could result in habitat disturbance to soil, vegetation, or other sheltering habitat for burrowing owl. As a primary habitat need, burrowing owls use rodent burrows, and can also occupy man-made structures such as irrigation pipes, for roosting and nesting cover. In California, the burrowing owl breeding season extends from 1 February to 31 August with some variances by geographic location and climatic conditions. Survey protocol for breeding season owl surveys states to conduct 4 survey visits: 1) at least one site visit between 15 February and 15 April, and 2) a minimum of three survey visits, at least three weeks apart, between 15 April and 15 July, with at least one visit after 15 June.

CDFW concurs that the Program should adhere to CDFW's March 7, 2012, [Staff Report on Burrowing Owl Mitigation](#). CDFW also concurs with the LCWA's proposal of a Burrowing Owl Management Plan to avoid and mitigate impacts, especially since there may be cumulative impacts to burrowing owls as a result of projects occurring adjacent to the LCWC (see *Comment #11 - Cumulative Impacts*). CDFW recommends a Burrowing Owl Management Plan be provided as an appendix in the DPEIR for review and commenting (also see *General Comments - Relying on future plans not adequate*).

**Least Bell's vireo (vireo):** The DPEIR states that vireo (*Vireo bellii pusillus*) have been observed within the Isthmus Area where suitable foraging habitat is limited to Zedler Marsh. It is unclear whether a recent vireo survey was conducted to determine if vireo in additional Areas in the LCWC. Vireo data presented in the DPEIR were from a 2012 survey while 2018 vireo data were based on incidental sightings instead of focused surveys. CDFW recommends a species-specific survey, focusing on potential nesting sites where Goodding's willow (*Salix gooddingii*) is present in the South and Central Areas.

Disturbance activities could result in temporary or long-term loss of suitable nesting and foraging habitats. Artificial light may attract or disorient migrating vireo by disrupting navigation (Ogden 1996; Longcore and Rich 2004, 2016) and may also suppress their immune system (Moore and Siopes 2000). CDFW also recommends a vireo-specific mitigation measure to minimize impacts to foraging habitat and potential nesting sites that states, "*prior to initiation of construction within or adjacent to suitable nesting habitat, a CDFW-approved biologist with experience surveying for and observing least Bell's vireo shall conduct preconstruction surveys in accordance with established protocols to establish use of nesting habitat. Surveys shall be conducted within and adjacent to suitable habitat, where access allows, during the nesting season (generally March 15 to July 31). If a nesting colony is found, no activity shall occur within a 500-foot buffer of the colony until a qualified biologist determines and CDFW confirms that all chicks have fledged and are no longer reliant on the nest site.*"

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Vireo is CESA-listed; therefore, if impacts to vireo cannot be avoided, an ITP needs to be secured prior to Program activities. CDFW recommends adding an additional vireo mitigation measure that states, “if take of least Bell’s vireo would occur from Program construction or activities, a state Incidental Take Permit (ITP) under CESA would be required.”

**Monarch butterfly – California overwintering population (Monarchs):** The DPEIR states that palm and eucalyptus trees in all four Areas provide suitable habitat for Monarchs (*Danaus plexippus*). The conceptual design for restoring each Area suggests most of the trees would be removed; therefore, there may be significant impacts to Monarchs if they are using trees in the LCWC. CDFW recommends a season appropriate survey for Monarchs to determine its presence or absence in the LCWC.

**Pacific green sea turtle (sea turtle):** CDFW recommends a sea turtle (*Chelonia mydas*) impact assessment, including impacts to eelgrass (*Zostera* sp.) habitat in the LCWC and in all channels up and downstream of LCWC. Sea turtles swim at higher speeds during the day and are mainly found in eelgrass meadows where they forage but could also swim out to more open channels (MacDonald et al. 2013). A discussion of potential impacts resulting from the following day-time Program activities and structures should be included: using an amphibious excavator, transporting soils and materials between channels, erecting temporary bridges across channels, and installing a boom or net across the San Gabriel River to collect trash floating downstream.

CDFW also recommends eelgrass habitat surveys and discussion of potential impacts. The [Los Cerritos Wetlands Habitat Assessment Report](#) also recommended eelgrass surveys and mapping but they were not completed in preparation of the DPEIR. Eelgrass is sensitive to burial by only five (5) centimeters of sediment, and buried eelgrass is more susceptible to increased mortality and delayed growth and flower production (Mills and Fonseca 2003; Munkes et al. 2015). The potential for impacts due to burial should be evaluated.

**Pacific pocket mouse (pocket mouse), south coast marsh vole (vole), southern California salt marsh shrew (shrew):** The vole (*Microtus californicus stephensi*) and shrew (*Sorex ornatus salicornicus*) are extremely rare; there are only seven and four CNDDDB records of the vole and shrew, respectively. All four Areas within the Program Area have suitable habitat for these small mammals. It is unclear if recent species-specific surveys have been completed; therefore, CDFW recommends species-specific, season and time of day appropriate surveys for pocket mouse (*Perognathus longimembris pacificus*), vole, and shrew, and mapping areas with suitable habitat and burrows. The pocket mouse may occupy burrows only one centimeter below the surface of soil (USFWS 2010). Accordingly, shallow burrows should not be dismissed as potential habitat for small mammals.

Direct and/or indirect impacts to these rare species would be significant. The DPEIR proposes preconstruction surveys and relocation of pocket mouse but the CDFW has determined this is insufficient to avoid impacts to the pocket mouse, vole, and shrew (also see *General Comments-Translocation/depositing seeds*). CDFW recommends the DPEIR include a discussion that evaluates, and a map that shows, where impacts to occupied habitat could be avoided to the extent feasible and potentially implementing

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no-effect buffers. Avoidance of burrows also includes the extent of underground tunnels.

If impacts are unavoidable, CDFW recommends a mitigation measure to restore/create upland habitat that would include appropriate substrate, flora, and fauna community required by small mammals. The DPEIR has proposed South Area restoration plans that reduce upland habitat in the long-term. The Program will not have a net benefit on small mammals unless there is sufficient upland habitat. Burrows used by small mammals are created by land-dwelling squirrels and pocket gophers. Small mammals need upland habitat and refugia, free from inundation, to escape from flooding during seasonal high tides, periodic storms, and future sea level rise (SLR).

CDFW would provide more meaningful avoidance and mitigation measures for the pocket mouse, vole, and shrew pending results of species-specific surveys.

#### **Raptors and nesting birds:**

- a) **Raptors:** CDFW recommends reevaluating conceptual designs such that they enhance and restore upland habitat that are resilient to flooding, high tides, periodic storms, and SLR. Upland habitat supports special-status and common small mammal species, insects, and reptiles that forms an ecosystem beneficial to raptors. Conceptual designs for restoring the South Area show a reduction in upland habitat in the long-term. The Program will not have a net benefit on raptors unless there is sufficient upland habitat. Upland habitat should be enhanced and restored to include soils that would support small mammal burrows, appropriate ratio of cover and open area, and appropriate vegetation composition (abundance, diversity, and cover) to support pollinators and insects.
- b) **Nesting birds:** CDFW recommends modifying Mitigation Measure BIO-4 regarding buffers for nesting birds to include the following: *“If nesting raptors and migratory songbirds are identified, the following minimum no-disturbance buffers shall be implemented: 300 feet around active passerine (perching birds and songbirds) nests, 500 feet around active non-listed raptor nests and 0.5 mile around active listed bird nests. These buffers shall be maintained until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. These buffers shall be increased if needed to protect the nesting birds.”*

**Red diamond rattlesnake (rattlesnake):** CDFW recommends a rattlesnake (*Crotalus ruber*) survey and mitigation measure be included in the DPEIR. A mitigation measure should include monitoring by a qualified biologist during construction activities occurring in occupied/potential habitat, especially during the active spring breeding season. If a rattlesnake is encountered, activities in the area should stop and an appropriate avoidance buffer established determined by a qualified biologist. Mitigation of upland/grassland habitat for special-status species (e.g. vole and shrew) would have a net benefit on the rattlesnake.

**Southern California DPS steelhead (steelhead) and tidewater goby (goby):** CDFW recommends species-specific, season and time of day appropriate surveys for steelhead (*Oncorhynchus mykiss irideus*) and goby (*Eucyclogobius newberryi*) to determine

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presence/absence. Both species have a moderate potential to occur in the North, South, and Central Areas. If present in the LCWC, impacts to steelhead and goby may occur from floating barges, amphibious equipment, and increases in sediment load.

**Western pond turtle (turtle):** The [Los Cerritos Wetlands Habitat Assessment Report](#) states there are several freshwater marsh areas that could be suitable for turtle (*Emys marmorata*) to inhabit. Impacts to turtle may occur from construction and habitat type conversion. CDFW recommends species-specific, season and time of day appropriate surveys for turtle. Turtles have been documented inhabiting ground squirrel burrows (Morey 2000). Accordingly, any surveys should also include upland habitat containing loose soil and burrows. CDFW recommends that surveys use the United States Geological Survey's 2006 [Western pond turtle Visual Survey Protocol for the Southcoast Ecoregion](#).

**Additional wildlife comments and mitigation measures:**

- a) **Proposed land bridge:** Figures 5-1, 5-2, and 5-3 show three land bridges (wildlife corridors) to be constructed across the Hellman Channel, San Gabriel River, and Westminster Avenue/Second Street. The DPEIR should provide supplemental documents in the Appendices that discuss the impetus, design, and necessity of these structures, and provide a discussion as to how bridges would facilitate wildlife movement around the LCWC.
- b) **Non-native vegetation:** Non-native vegetation could provide habitat for small mammals, birds, insects, and snakes. Large areas of black mustard (*Brassica nigra*), poison hemlock (*Conium maculatum*), ripgut brome (*Bromus diandrus*) and other ruderal vegetation in the South Area could support wildlife (see Appendix C, Figure 4). CDFW recommends that surveys of special-status wildlife species dependent on grasslands/upland habitat include searches in areas of non-native vegetation-dominated cover. CDFW also recommends including a mitigation measure to reduce impacts to wildlife during activities in areas of dense non-native vegetation. A mitigation measure should include biomonitoring by a qualified biologist and moving wildlife out of harm's way (see below and *General Comment – Moving out of harm's way*).
- c) CDFW recommends an additional BIO Mitigation Measure that states, "A biological monitor shall be present before and during initial grubbing and grading operations to salvage wildlife species that may be killed or injured by heavy equipment. Fossorial mammal den sites shall be inspected and not disturbed until confirmed unoccupied. Salvaged wildlife of low mobility shall be removed and placed onto adjacent habitat out of harm's way. Grubbing and grading shall be done to avoid islands of habitat where wildlife may take refuge and later be killed by heavy equipment. Grubbing and grading shall be done from the center of a site, working outward towards adjacent habitat out of the construction footprint where wildlife may safely escape."
- d) The Program may result in the use of open pipes used as fence posts, property line stakes, signs, etc. These structures mimic the natural cavities preferred by various bird species and other wildlife for shelter, nesting, and roosting. Raptor's

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talons can become entrapped within the bolt holes of metal fence stakes resulting in mortality. Due to the location of the LCWC and the open space that is in the surrounding vicinity, CDFW recommends adding the following as a BIO mitigation measure: *“All hollow posts and pipes shall be capped, and metal fence stakes shall be plugged with bolts or other plugging materials to prevent wildlife entrapment and mortality.”*

**Comment #4 - Plants:** CDFW finds the DPEIR does not adequately disclose information regarding rare plants or provide sufficient detail describing mitigation measures for impacts to rare plants and vegetation communities. CDFW recommends the LCWA address the following.

**California boxthorn (*Lycium californicum*), woolly seablite (*Suaeda taxifolia*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), estuary seablite (*Suaeda esteroa*), Lewis' primrose (*Camissoniopsis lewisii*), southern tarplant (*Centromadia parryi* ssp. *australis*), southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*):** For each rare plant, please provide the largest area covered or highest count observed in in the LCWC using data from 2012 to 2018. Please also provide an approximate count of plants per rare plant polygon shown in Figures 3.3-2a through 3.3-2d. Then, for each rare plant, estimate the number of individuals or area potentially impacted by the Program. For example, page 28 of the [CRP EIR Restoration Plan](#) states, *“approximately 2,632 of 6,000 southern tarplant would potentially be affected [in the North Area] by grading with additional impacts associated with berm construction.”* Please also show which individuals/polygons will be impacted on maps. If additional data has been collected since 2018, please incorporate recent data into this analysis. This information will inform the appropriate mitigation ratio for each species impacted by the Program and allow CDFW to comment on alternatives to avoid impacts.

**Estuary seablite:** Figure 3.3-2d shows estuary seablite as points (i.e. individual plants occurring in specific areas). Page 22 of the [Los Cerritos Wetlands Habitat Assessment Report](#) show estuary seablite occurring in two large polygons, suggesting that plants are more widespread around Steamshovel Slough than shown in Figure 3.3-2d. Please clarify whether estuary seablite currently occurs as a few individuals restricted to specific areas or many more plants distributed across a larger area. Include if estuary seablite decreased in abundance and distribution between 2011/12 and 2018 to cause the difference between the maps.

**Mitigation ratio:** CDFW disagrees with a minimum mitigation ratio of 1:1 for special-status plants, stating *“one plant planted for one removed, or 1 square foot (sq.ft.) of absolute cover planted for 1 sq.ft. removed.”* Plants that have a California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) of 1B (Coulter's goldfields, estuary seablite, southern tarplant) are rare throughout their range, endemic to California, and are seriously or moderately threatened in California. A review of California Natural Diversity Database (CNDDDB) (1990 to present) found only 11 records of southern tarplant, two of estuary seablite, and zero of Coulter's goldfields in Los Angeles County, making these 1B-listed species extremely rare locally and state-wide. The Program has potential to directly impact Coulter's goldfields and southern tarplant throughout the LCWC, including their seed bank, and significantly alter and disturb the habitat that currently support these species. CDFW recommends a minimum mitigation ratio of 3:1 for southern tarplant and a minimum of 7:1 for Coulter's goldfields and estuary seablite

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which currently occur in smaller, localized areas within the LCWC. Therefore, these species are more susceptible to being extirpated due to Program activities.

California boxthorn, Lewis' primrose, southwestern spiny rush, and woolly seablite have a CRPR of 3 or 4. These species occur only as very few individuals or sparsely covered patches in the LCWC. CDFW recommends a minimum mitigation ratio of 7:1. The Program has potential to directly impact the few plants that currently exist on site and extirpate Lewis' primrose by converting upland and sandy soils to mid-marsh. Plants listed by the CNPS as CRPR 3 and 4 meets the definitions of CESA of the California Fish and Game Code and are eligible for state listing. Many CRPR 3 and 4 plants are significant locally, and CDFW recommends that they be evaluated for impact significance during preparation of environmental documents relating to CEQA, based on CEQA Guidelines, §§ 15125, subd. (c), 15380.

Mitigation requirements are subject to change pending CDFW's review of additional rare plant data to be provided by the LCWA.

**Sensitive communities:** Vegetation communities, alliances, and associations with a state-wide ranking of S1, S2, S3 and S4 should be considered sensitive and declining at the local and regional level. There are three S2-ranked communities in the LCWC: *Anemopsis californica–Helianthus nuttallii–Solidago spectabilis* Herbaceous Alliance (0.01 acres), *Baccharis salicina* Provisional Shrubland Alliance (0.04 acres), *Cressa truxillensis–Distichlis spicata* Herbaceous Alliance (2.41 acres). CDFW disagrees with a minimum mitigation ratio of 1:1 for sensitive communities and recommends mitigating 5:1, on par with mitigating S2-ranked communities under the [Los Angeles County's Significant Ecological Areas Ordinance](#). *D. spicata* is the only host plant for the salt marsh wandering skipper (*Panoquina errans*). CDFW recommends a mitigation ratio of 3:1 for S3 ranked communities.

CDFW also recommends the DPEIR include a discussion as to the reasoning for a 60 percent absolute vegetation cover success criterion for sensitive vegetation communities to allow CDFW to provide additional comments.

**Mitigation site(s):** CDFW recommends the LCWA disclose where mitigation will take place, on or off site, and why the selected mitigation area(s) are appropriate for each special-status species or sensitive vegetation community based on vegetation composition, soils, substrate, slope, etc. See additional comments regarding mitigation under *General Comments - Compensatory Mitigation*. Disclosures could be made in a Mitigation, Maintenance, and Monitoring Program and/or Restoration Plan for rare plants and sensitive vegetation communities (see below).

**Restoration plan for rare plants and sensitive vegetation communities:** The DPEIR does not specify performance criteria by species or time to ensure that proposed measures, as implemented, will be effective in restoring or enhancing rare plant abundance, cover, and diversity (Save Agoura Cornell Knoll v. City of Agoura Hills), nor include any monitoring or assessment to demonstrate how the proposed measures would mitigate take of CEQA-rare plants. An environmental impact report is inadequate if the success or failure of mitigation efforts may largely depend upon management plans that have not yet been formulated and have not been subject to analysis and review

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within the EIR (Pub. Resources Code, § 21000 *et seq.*). See additional comments under *General Comments - Relying on future plans not adequate*

CDFW concurs with a Mitigation, Maintenance, and Monitoring Program for sensitive vegetation communities and recommends that a Mitigation, Maintenance, and Monitoring Program and/or Restoration Plan for rare plants and sensitive vegetation communities be provided as an appendix in the DPEIR for review and comment. CDFW recommends that a Mitigation, Maintenance, and Monitoring Program and/or Restoration Plan discuss following: 1) species-specific planting (i.e. container or seed) methods, 2) species-specific measurable goals and success criteria (e.g. number of individuals, percent survival rate, absolute cover) for establishing self-sustaining populations, 3) long-term monitoring and 4) adaptive management techniques. The DPEIR proposes a minimum mitigation ratio of “*1 sq.ft. of absolute cover planted for every 1 sq.ft. removed.*” CDFW finds this to be insufficient because 1 sq.ft. does not account for the microecosystem necessary to support rare plants. Rare plants existing as part of a community and planting only the rare plant will not ensure the plant will survive. CDFW also recommends that the DPEIR discuss vegetation composition (species abundance, diversity, cover), soils, substrate, slope, hydrology, and other factors required by a specific species to persist, and how these factors will be incorporated into species-specific planting methods.

The DPEIR states that “*plants that cannot be avoided shall be salvaged prior to impacts using species-specific propagation methods, such as transplanting, seed and cuttings. Seeds shall be incorporated into habitat-specific seed mixes that will be used for revegetation of the restoration areas.*” Seed mixes may not be appropriate because not all species grow well from direct seeding. It is also more difficult to control where rare plant seeds are distributed and if seeds made proper contact with soil. Transplantation is rarely successful in establishing rare plants at new locations. A study by CDFW (Fiedler 1991) found that, even under optimum conditions with ample time for planning, transplantation was effective in only 15 percent of cases studied. Other reviews (e.g. Allen 1994; Howald 1996) have found similar problems digging up, transporting, and replanting plants, bulbs, rhizomes, or seeds imposes a tremendous stress on a plant. They can easily die in the process. Scientifically tested, reliable methods for salvage, propagation, translocation, or transplantation are not available for many rare species. Additionally, CDFW is concerned with translocating, or moving collected seed to an undisclosed mitigation location or between different locations. 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.

**Comment #5 – Restoration Techniques:** CDFW recommends including following text in italics as one or more BIO mitigation measure(s) as it relates to the Program and future project-specific plans. CDFW also recommends further consideration of the Program’s approach to herbicide use and control of non-native invasive plants

**Revegetation/Restoration Plan:** “*Plans for restoration and re-vegetation shall be prepared by persons with expertise in southern California ecosystems and native plant restoration techniques. Plans shall identify the assumptions used to develop the proposed restoration strategy. Each plan shall include, at a minimum: a) the location of*

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*restoration sites and assessment of appropriate reference sites; b) the plant species to be used, sources of local propagules, container sizes, and planting or seeding rates; c) a schematic depicting the restoration area; d) a local seed and cuttings and planting schedule; e) a description of the irrigation methodology; f) measures to control exotic vegetation on site; g) specific success criteria; h) a detailed monitoring program; i) contingency measures should the success criteria and providing for conservation of the mitigation on site in perpetuity. Monitoring of restoration areas shall extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.”*

- a) *“Local on-site propagules from the Program Area and nearby vicinity shall be collected and used for restoration purposes. On-site seed collection shall be initiated in the near future to accumulate sufficient propagule material for subsequent use in future years. On-site vegetation maps at the alliance and/or associated level shall be used to develop appropriate restoration goals and local plant palettes. Reference areas shall be identified to help guide restoration efforts and restoration plans shall clearly discuss where these reference area(s) are and why they were chosen/are appropriate. Specific restoration plans shall be developed for various Program components as appropriate.”*
  
- b) *“Restoration objectives shall include providing special habitat elements where feasible to benefit key wildlife species. These physical and biological features can include (for example) retention of woody material, logs, snags, rocks, and brush piles.”*

**Herbicide:** CDFW recommends the DPEIR expand on the herbicide-use language on page 2-77 by providing safety measures, protocols, and standards regarding herbicide use (or no herbicide use) around special-status plants, wildlife, and vegetation communities. CDFW recommends appropriate buffer zones to protect species-status species, including habitat structures, from direct herbicide contact and drift.

**Non-native vegetation:** CDFW recommends controlling large areas of black mustard, ripgut brome, and poison hemlock in phases instead of removing all vegetation at one time. Non-native vegetation could support wildlife such as birds, small mammals, small frogs, and snakes, which could be displaced if non-native vegetation is completely removed and native vegetation has yet to be restored. Non-native vegetation should remain in place to the extent feasible to support wildlife until seeded or planted native vegetation reaches an appropriate size, density, and abundance.

**Comment #6 – Jurisdictional Delineation:** CDFW finds the DPEIR’s jurisdictional delineation insufficient and recommends the following.

**Lake or Streambed Alteration (LSA) Agreements:** As a Responsible Agency under CEQA, CDFW has authority over activities in streams and/or lakes that will divert or obstruct the natural flow; or change the bed, channel, or bank (including vegetation associated with the stream or lake) of a river or stream; or use material from a streambed. For any such activities, the project applicant (or “entity”) must provide written notification to CDFW pursuant to section 1600 *et seq.* of the Fish and Game Code. As a Responsible Agency, CDFW may consider the CEQA document prepared by the local

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jurisdiction (Lead Agency) for the Program. To minimize additional requirements by CDFW pursuant to section 1600 *et seq.* and/or under CEQA, the DPEIR 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.

**Delineation:** CDFW recommends modifications to jurisdiction delineation:

- a) The DPEIR does not distinguish between CDFW and California Coastal Commission (CCC). CDFW recommends separating CDFW and CCC jurisdiction.
- b) Page 3.3-76 states, “*potential state jurisdictional waters within the program area includes 234 acres (Figures 3.3-4a through 3.3-7b). It should be noted that approximately 57 acres were not assessed due to inaccessibility but may contain potentially state jurisdictional waters based on review of aerial imagery (Google Earth Pro, 2019)*”. Please clarify in the text and show on the map the location of these unassessed 57 acres.
- c) The [USFWS Wetlands Mapper](#) shows there are wetlands in the Hellman Retained Site and Los Alamitos Retarding Basin Site, both within the Program Area. There is potentially federal (e.g. USACE Section 10) and/or state (e.g. CCC, CDFW) jurisdiction as it is hydrologically connected to the Los Alamitos Channel and the Federal Storm Channel. Please discuss potential federal and/or state jurisdiction and show jurisdiction on maps.
- d) Page 3.3-6.7 describes areas that are subject to USACE Section 10 Waters, but this is not reflected on the map. Please show on maps USACE Section 10 Waters.
- e) CDFW disagrees with the DPEIR’s conclusion on page 3.3-62 that states, “*there are no “isolated” or “non-federal” waters that would be subject to waste discharge requirements under the Porter Cologne Water Quality Control Act.*” The [USFWS Wetlands Mapper](#) shows there are isolated wetlands that may be subject to 1602 if these are hydrologically connected or is subject to CCC if it is within a coastal zone.

**Comment #7 – Pumpkin Patch Site:** Although the Pumpkin Patch Site is outside the Program Area boundary, it is close to Belding’s savannah sparrow habitat within the Program Area. The DPEIR describes restoration of the Pumpkin Patch Site but also installation of a new office (page 2-23). Please clarify whether the new office will conflict with restoration of the site and could potentially impact Belding’s savannah sparrows (i.e. noise level, increased human activity).

**Comment #8 – Plan Alternatives:** CDFW recommends reevaluating long-term conceptual plans, especially for the South Area (e.g. Figure 2-14) to diversify based on vegetation communities, not only habitat types. Upland habitats have ecological value but the long-term plan for the South Area does not show sufficient upland habitat. Upland habitats should be resilient to 1.7 and 3.5 ft. of SLR. Conceptual plans could be modified to incorporate space to

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accommodate upward migration/dispersal of plants and vegetation communities under the pressure of SLR.

Page 5-2 states, “*the alternatives (minimum alteration, moderate alteration, and maximum alteration) include varying degrees of alterations to existing site conditions under a range of sea level rise scenarios*”. Please clarify the SLR used (i.e. 1.7 and 3.5 ft.) for the alternatives presented. CDFW recommends including alternatives under both SLR projections if only one was considered. CDFW also recommends the DPEIR clarify whether the three alternatives (Figures 5-1, 5-2, 5-3) reflect near, mid, or long-term restoration.

**Comment #9 – Phasing:** The DPEIR proposes a Program that will constantly modify the LCWC over the next 20 years. Erecting, lowering, breaching, removing berms or flood walls after or during restoration may impact and disrupt biological resources and water flow. For example, restoration progress made in the South LCWA site in the near and mid-term may be reversed, slowed, or impacted due to berm and levee removal activities proposed in the long-term. CDFW recommends the LCWA minimize disruptive activities and consider workflows (i.e. Table ES-1, ES-2, ES-3, ES-4) that strategically schedules landscape and waterflow-altering projects for the near-term.

Page 3-40 states, “*portions of the program area, including levees, berms and flood walls, trails, and restored ecosystem area would be located within the Newport-Inglewood Fault Zone and could be exposed to fault rupture. Damage to levees, berms and flood walls, trails, and the restored ecosystem area would consist only of earth movement, which would not expose people to risks because people would not be inside collapsing buildings or under bridges*”. An earthquake may impact biological resources if the earthquake results in spills. CDFW recommends the LCWA minimize these risks by scheduling projects to plug oil and natural gas wells and storage facilities for the near-term. Oil spills can reverse, slow, or impact restoration progress and cause ecological damage.

**Comment #10 – Impacts to biological resources along the San Gabriel River:** To increase tidal flows and inundate areas of the LCWC not previously inundated, water will be drawn from the San Gabriel River. CDFW recommends an assessment and discussion of potential impacts to biological resources up and downstream of the LCWC along the San Gabriel River because the Program could lead to a drop in water level. A review of CNDDDB found western spadefoot (*Spea hammondi*), tricolored black bird (*Agelaius tricolor*), and western pond turtle upstream of the LCWC restoration area. Furthermore, reconnection of the river to a large floodplain could cause erosion of the marsh during a large storm event, which could deliver sediment-laden runoff further down the river or to the ocean.

**Comment #11 - Cumulative Impacts:** The Seal Beach Residential Project is proposed on a large, vacant lot that could result in significant impacts to special-status wildlife species such as burrowing owls. The Haynes Generating Station Intake Channel Infill Project will occur partially in the South Area that may impact aquatic resources such as the Pacific green sea turtle, California least tern (*Sterna antillarum browni*), and essential fish habitat. CDFW recommends the LCWA show where the Seal Beach Residential Project and Haynes Generating Station Intake Channel Infill Project will occur, avoid impacts to the burrowing owl habitat in the Callaway Marsh Site (see page 5), and conduct species-specific surveys for the Pacific green sea turtle (see page 6). This will allow CDFW to provide additional comments on cumulative impacts of the proposed Program.

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## GENERAL COMMENTS

**Comment #1 - California Endangered Species Act (CESA):** CDFW considers adverse impacts to a species protected by CESA to be significant without mitigation under CEQA. As to CESA, take of any endangered, threatened, candidate species, or CESA-listed rare plant species that results from the Program is prohibited, except as authorized by state law (Fish and G. Code, §§ 2080, 2085; Cal. Code Regs., tit. 14, §786.9). Consequently, if the Program, project construction, or any Program-related activity during the life of the Program will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, CDFW recommends that the LCWA seek appropriate take authorization under CESA prior to implementing the Program. Appropriate authorization from CDFW may include an Incidental Take Permit (ITP) 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 the Program 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 Program CEQA document addresses all Program 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.

**Comment #2 - Compensatory Mitigation:** Mitigation measures for adverse Program-related impacts to sensitive plants, animals, and habitats should emphasize avoidance and reduction of Program impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. Areas proposed as mitigation lands should be protected in perpetuity with a conservation easement, financial assurance and dedicated to a qualified entity for long-term management and monitoring. Under Government Code section 65967, the Lead Agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves. Mitigation banking inquiries may be directed to the CDFW's South Coast Region Banking Coordinator, Lisa Gymer, via email at [Lisa.Gymer@wildlife.ca.gov](mailto:Lisa.Gymer@wildlife.ca.gov).

**Comment #3 - Moving out of Harm's Way:** The proposed Program is anticipated to result in clearing of natural habitats that support many species of indigenous wildlife. To avoid direct mortality, we recommend that a qualified biological monitor approved by CDFW be on site prior to and during ground and habitat disturbing activities to move out of harm's way special status species or other wildlife of low mobility that would be injured or killed by grubbing or Program-related construction activities. It should be noted that the temporary relocation of on-site wildlife does not constitute effective mitigation for the purposes of offsetting Program impacts associated with habitat loss.

**Comment #4 - Relying on future plans not adequate:** CEQA Guidelines sections 15070 and 15071 require the document to analyze if the Program may have a significant effect on the environment as well as review if the Program will 'avoid the effect or mitigate to a point where clearly no significant effects would occur'. Relying on future surveys, the preparation of future management plans, or mitigating by obtaining permits are considered deferred mitigation under

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CEQA. To analyze if the Program may have a significant effect on the environment, the Program related impacts, including survey results for species that occur in the entire Program Area need to be disclosed during the public comment period. This information is necessary to allow CDFW to comment on alternatives to avoid impacts, as well as to assess the significance of the specific impact relative to the species (e.g., current range, distribution, population trends, and connectivity).

**Comment #5 - Translocation/depositing seeds:** Translocation and transplantation is the process of moving an individual from one project site and permanently moving it to a new location. CDFW generally does not support the use of, translocation or transplantation as the primary mitigation strategy for unavoidable impacts to rare, threatened, or endangered plant or wildlife species. Studies have shown that these efforts are experimental and the outcome unreliable. CDFW has found that permanent preservation and management of habitat capable of supporting these species is often a more effective long-term strategy for conserving sensitive plants and animals and their habitats.

Per CEQA Guidelines Section 21081.6(a)(1), CDFW has provided the LCWA with a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation and Monitoring Reporting Plan (MMRP; Attachment A).

### Filing Fees

The Program as proposed, could 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 Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order 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 Los Cerritos Wetland Restoration Program to assist the Los Cerritos Wetlands Authority in adequately analyzing and minimizing/mitigating impacts to biological resources. CDFW requests an opportunity to review and comment on any response that the LCWA has to our comments and to receive notification of any forthcoming hearing date(s) for the Program [CEQA Guidelines, § 15073(e)]. If you have any questions or comments regarding this letter, please contact Ruby Kwan-Davis, Senior Environmental Scientist, at [Ruby.Kwan-Davis@wildlife.ca.gov](mailto:Ruby.Kwan-Davis@wildlife.ca.gov) or (657) 215-1007.

Sincerely,

DocuSigned by:  
  
DC7324F4C5BB489...

Erinn Wilson  
Environmental Program Manager I

cc: CDFW

Victoria Tang – Los Alamitos  
Karen Drewe – Los Alamitos  
Frederic Reiman – Los Alamitos

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Susan Howell – San Diego  
Jennifer Turner—San Diego  
Lisa Gymer – San Diego  
CEQA Program Coordinator – Sacramento

State Clearinghouse

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**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



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

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

<b>Biological Resources (BIO)</b>			
	<b>Mitigation Measure (MM)</b>	<b>Timing</b>	<b>Responsible Party</b>
<b>MM-BIO-1-Species-specific surveys</b>	<p>Conduct additional species-specific surveys to completely disclose presence/absence and potential impacts to the following species and their habitat: bats, Belding's savannah sparrow, burrowing owl, Least bell's vireo, Monarch butterfly, Pacific green sea turtle, Pacific pocket mouse, south coast marsh vole, southern California marsh shrew, red diamond rattlesnake, southern California DPS steelhead, tidewater goby, and western pond turtle. Focused surveys shall be conducted at the appropriate season and time of day when the sensitive species are active or otherwise identifiable. Seasonal variations in species use of the Program Area shall be addressed. Surveys shall follow accepted scientific protocol and be conducted by a qualified biologist, botanist, or species specialist with the appropriate experience.</p>	Prior to Program construction/activities	LCWA
<b>MM-BIO-2-Species-specific surveys</b>	<p>LCWA shall disclose survey findings, including negative findings, and recirculate the DPEIR so CDFW may review and provide meaningful avoidance, minimization, and mitigation measures.</p> <p>The Final Environmental document shall include full analysis of impacts to the species listed in MM-BIO-1 and proposed species-specific avoidance measures, and mitigation if impacts cannot be voided.</p>	Prior to Program construction/activities	LCWA

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<b>MM-BIO-3-Impacts to Bats-Focused survey</b>	Conduct species-specific surveys for bats at the appropriate season and time of day to document any daytime, nighttime, and maternity roosting sites. Surveys shall include acoustic recognition technology to maximize detection of bats.	Prior to Program construction/activities	LCWA
<b>MM-BIO-4-Impacts to Belding's savannah sparrow</b>	Include a discussion that evaluates, and a map that shows, where Belding's sparrow habitat could be avoided to the extent feasible, prioritizing areas of high nesting activity, and potentially implementing no-effect buffers around these areas.	Prior to Program construction/activities	LCWA
<b>MM-BIO-5-Impacts to Belding's savannah sparrow</b>	Modify Mitigation Measure BIO-3 in the DPEIR to include a statement acknowledging that an Incidental Take Permit (ITP) under CESA may be needed if impacts to Belding's sparrow cannot be avoided.	Prior to Program construction/activities	LCWA
<b>MM-BIO-6-Impacts to Belding's savannah sparrow</b>	LCWA shall provide a Belding's sparrow Mitigation, Maintenance and Monitoring Program as an appendix to the DPEIR for review and commenting.	Prior to Program construction/activities	LCWA
<b>MM-BIO-7-Impacts to Belding's savannah sparrow</b>	LCWA shall reevaluate proposed location and alignment of trails, viewpoints, visitor centers, and parking areas in order to minimize public access/anthropogenic disturbance near Belding's sparrow habitat, prioritizing areas of high nesting activity.	Prior to Program construction/activities	LCWA

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<p><b>MM-BIO-8-Impacts to Burrowing owls</b></p>	<p>Conduct species-specific surveys for burrowing owls and identify wintering habitat. In California, the burrowing owl breeding season extends from 1 February to 31 August with some variances by geographic location and climatic conditions. Survey protocol for breeding season owl surveys states to conduct 4 survey visits: 1) at least one site visit between 15 February and 15 April, and 2) a minimum of three survey visits, at least three weeks apart, between 15 April and 15 July, with at least one visit after 15 June.</p>	<p>Prior to Program construction/activities</p>	<p>LCWA</p>
<p><b>MM-BIO-9-Impacts to Burrowing owls</b></p>	<p>LCWA shall provide a Burrowing Owl Management Plan as an appendix in the DPEIR for review and commenting. A Burrowing Owl Management Plan shall adhere to CDFW's March 7, 2012, <a href="#">Staff Report on Burrowing Owl Mitigation</a></p>	<p>Prior to Program construction/activities</p>	<p>LCWA</p>
<p><b>MM-BIO-10-Impacts to least Bell's vireo</b></p>	<p>Conduct species-specific surveys for least Bell's vireo, focusing on potential nesting sites where Goodding's willow (<i>Salix gooddingii</i>) is present in the South and Central Areas.</p>	<p>Prior to Program construction/activities</p>	<p>LCWA</p>
<p><b>MM-BIO-11- Impacts to Least Bell's Vireo</b></p>	<p>Include an vireo-specific mitigation measure to minimize impacts to foraging habitat and potential nesting sites that shall state, "<i>prior to initiation of construction within or adjacent to suitable nesting habitat, a CDFW-approved biologist with experience surveying for and observing least Bell's vireo shall conduct preconstruction surveys in accordance with established protocols to establish use of nesting habitat. Surveys shall be conducted within and adjacent to suitable habitat, where access allows, during the nesting season (generally March 15 to July 31). If a nesting colony is found, no activity shall occur within a 500-foot buffer of the colony until a qualified biologist determines and CDFW confirms that all chicks have fledged and are no longer reliant on the nest site.</i>"</p>	<p>To be implemented during Program construction/activities</p>	<p>LCWA</p>

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<b>MM-BIO-12-Impacts to Least Bell's Vireo</b>	Add a mitigation measure that shall state, <i>"if take of least Bell's vireo would occur from Program construction or activities, a state Incidental Take Permit (ITP) under CESA would be required."</i>	Prior to Program construction/activities	LCWA
<b>MM-BIO-13-Impacts to Monarch butterfly</b>	Conduct a species-specific survey for Monarch butterflies. The DPEIR states that palm and eucalyptus trees in all four Areas provide suitable habitat for Monarchs. There may be impacts to Monarch butterflies if trees are removed to restore wetlands.	Prior to Program construction/activities	LCWA
<b>MM-BIO-14-Impacts to Pacific green sea turtle</b>	Conduct a species-specific impact assessment in the Program Area and in all channels up and downstream of LCWC. Discuss potential impacts to sea turtles resulting from the following day-time activities and structures shall be included: using an amphibious excavator, transporting soils and materials between channels, erecting temporary bridges across channels, and installing a boom or net across the San Gabriel River to collect trash floating downstream.	Prior to Program construction/activities	LCWA
<b>MM-BIO-15-Impacts to Pacific green sea turtle</b>	Conduct surveys and mapping of eelgrass habitat ( <i>Zostera</i> sp.) in all channels up and downstream of LCWC and discuss potential impacts. Eelgrass is sensitive to burial by only 5 centimeters of sediment and buried eelgrass is more susceptible to increased mortality and delayed growth and flower production. The potential for impacts due to burial shall be evaluated.	Prior to Program construction/activities	LCWA
<b>MM-BIO-16-Impacts to Pacific pocket mouse, south coast marsh vole, and southern California salt marsh shrew</b>	Conduct species-specific, season and time of day appropriate surveys for pocket mouse, vole, and shrew, and map areas with suitable habitat and burrows.	Prior to Program construction/activities	LCWA

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<b>MM-BIO-17-Impacts to Pacific pocket mouse, south coast marsh vole, and southern California salt marsh shrew</b>	<p>Evaluate where impacts to occupied habitat could be avoided to the extent feasible and potential to implement no-effect buffers. Avoidance of burrows also includes the extent of underground tunnels.</p>	<p>Prior to Program construction/activities</p>	<p>LCWA</p>
<b>MM-BIO-18- Impacts to Pacific pocket mouse, south coast marsh vole, and southern California salt marsh shrew</b>	<p>Include a mitigation measure to restore/create upland habitat that would include appropriate substrate, flora, and fauna community required by small mammals.</p>	<p>Prior to Program construction/activities</p>	<p>LCWA</p>
<b>MM-BIO-19-Impacts to Raptors</b>	<p>LCWA shall reevaluate conceptual designs such that they enhance and restore upland habitat that would be resilient to flooding, high tides, periodic storms, and sea level rise. Upland habitat shall support special-status and common small mammal species, insects, and reptiles that forms an ecosystem beneficial to raptors.</p>	<p>Prior to Program construction/activities</p>	<p>LCWA</p>
<b>MM-BIO-20-Impacts to Nesting birds</b>	<p>Modify Mitigation Measure BIO-4 regarding buffers for nesting birds to include the following: <i>“If nesting raptors and migratory songbirds are identified, the following minimum no-disturbance buffers shall be implemented: 300 feet around active passerine (perching birds and songbirds) nests, 500 feet around active non-listed raptor nests and 0.5 mile around active listed bird nests. These buffers shall be maintained until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. These buffers shall be increased if needed to protect the nesting birds.”</i></p>	<p>To be implemented during to Program construction/activities</p>	<p>LCWA</p>

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<b>MM-BIO-21-Impacts to Red diamond rattlesnake</b>	Conduct a species-specific survey for red diamond rattlesnake.	Prior to Program construction/activities	LCWA
<b>MM-BIO-22-Impacts to Red diamond rattlesnake</b>	Include a mitigation measure that includes monitoring by a qualified biologist during construction activities occurring in occupied/potential habitat, especially during the active spring breeding season. If a rattlesnake is encountered, activities in the area shall stop and an appropriate avoidance buffer established determined by a qualified biologist	To be implemented during to Program construction/activities	LCWA
<b>MM-BIO-23-Impacts to Southern California DPS steelhead and tidewater goby</b>	Conduct a species-specific, season and time of day appropriate surveys for steelhead and goby to determine presence/absence. Both species have a moderate potential to occur in the North, South, and Central Areas.	Prior to Program construction/activities	LCWA
<b>MM-BIO-24-Impacts to Western pond turtle</b>	Conduct a species-specific survey for western pond turtles. WPT have been documented inhabiting ground squirrel burrows, therefore, surveys shall also include upland habitat containing loose soil and burrows. Surveys shall use CDFW recommends that surveys use the United States Geological Survey's <a href="#">2006 Western pond turtle Visual Survey Protocol for the Southcoast Ecoregion</a> .	Prior to Program construction/activities	LCWA
<b>MM-BIO-25-Impacts to Wildlife</b>	Provide supplemental documents in the Appendix that discuss the impetus, design, and necessity of land bridges proposed in Figure 51, 5-2, and 5-3, and provide a discussion as to how bridges would facilitate wildlife movement around the LCWC.	Prior to Program construction/activities	LCWA

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<b>MM-BIO-26-Impacts to Wildlife</b>	Include areas of non-native vegetation-dominated cover in focused surveys for special-status wildlife species dependent on grasslands/upland habitat where appropriate.	Prior to Program construction/activities	LCWA
<b>MM-BIO-27-Impacts to Wildlife</b>	Include an additional BIO Mitigation Measure that shall state, <i>“A biological monitor shall be present before and during initial grubbing and grading operations to salvage wildlife species that may be killed or injured by heavy equipment. Fossorial mammal den sites shall be inspected and not disturbed until confirmed unoccupied. Salvaged wildlife of low mobility shall be removed and placed onto adjacent habitat out of harm’s way. Grubbing and grading shall be done to avoid islands of habitat where wildlife may take refuge and later be killed by heavy equipment. Grubbing and grading shall be done from the center of a site, working outward towards adjacent habitat out of the construction footprint where wildlife may safely escape.”</i>	To be implemented during to Program construction/activities	LCWA
<b>MM-BIO-28-Impacts to Wildlife</b>	The Program may result in the use of open pipes used as fence posts, property line stakes, signs, etc. 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. Due to the location of the LCWC and the open space that is in the surrounding vicinity, the following BIO mitigation measure shall be added: <i>“All hollow posts and pipes shall be capped, and metal fence stakes shall be plugged with bolts or other plugging materials to prevent wildlife entrapment and mortality.”</i>	To be implemented during to Program construction/activities	LCWA

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<p><b>MM-BIO-29-Impacts to Rare plants</b></p>	<p>Disclose population information for rare plants documented in the Program Area using data collected from 2012 through 2018. Estimate of number of individuals or area potentially impacted by the Program and show which polygons/plants will be impacted. If additional data has been collected since 2018, LCWA shall incorporate recent data into this analysis.</p>	<p>Prior to Program construction/activities</p>	<p>LCWA</p>
<p><b>MM-BIO-30-Impacts to Estuary seablite</b></p>	<p>Figure 3.3-2d shows estuary seablite as points (i.e. individual plants occurring in specific areas). Page 22 of the <a href="#">Los Cerritos Wetlands Habitat Assessment Report</a> shows estuary seablite occurring in two large polygons, suggesting plants are more widespread around Steamshovel Slough than shown in Figure 3.3-2d. Clarify whether estuary seablite currently occurs as a few individuals restricted to the shore or many more plants distributed across a larger area.</p>	<p>Prior to Program construction/activities</p>	<p>LCWA</p>
<p><b>MM-BIO-31-Impacts to Rare plants</b></p>	<p>LCWA shall use the following minimum mitigation ratios for rare: 3:1 for southern tarplant and 7:1 for Coulter's goldfields, estuary seablite, California boxthorn, Lewis' primrose, southwestern spiny rush, and woolly seablite.</p>	<p>Prior to Program construction/activities</p>	<p>LCWA</p>
<p><b>MM-BIO-32-Impacts to Sensitive vegetation communities</b></p>	<p>LCWA shall use the following minimum mitigation ratios for sensitive vegetation communities: 5:1 for S2-ranked communities and 3:1 for S3-ranked communities.</p> <p>LCWA shall include a discussion as to the reasoning for a 60 percent absolute vegetation cover success criterion for restoring sensitive vegetation communities.</p>	<p>Prior to Program construction/activities</p>	<p>LCWA</p>

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<b>MM-BIO-33-Impacts to Rare plants and sensitive vegetation communities</b>	LCWA shall disclose where mitigation will take place, on or off site, and why the selected mitigation area(s) are appropriate for each special-status species or sensitive vegetation community based on vegetation composition, soils, substrate, slope, etc. Disclosures could be made in a Mitigation, Maintenance, and Monitoring Program and/or Restoration Plan for rare plants and sensitive vegetation communities (see below).	Prior to Program construction/activities	LCWA
<b>MM-BIO-34-Impacts to Rare plants and sensitive vegetation communities</b>	LCWA shall provide a Mitigation, Maintenance, and Monitoring Program and/or Restoration Plan for rare plants and sensitive vegetation communities as appendices in the DPEIR for review and commenting.	Prior to Program construction/activities	LCWA
<b>MM-BIO-35-Restoration Techniques</b>	LCWA shall use Restoration Techniques described under <b>Comment #5</b> (page 11) for project-level activities under the Program and include the language as a BIO mitigation measure.	To be implemented during Program construction/activities	LCWA
<b>MM-BIO-36-Restoration Techniques</b>	LCWA shall expand on the herbicide-use language on page 2-77 by providing safety measures, protocols, and standards regarding herbicide use (or no herbicide use) around special-status plants, wildlife, and vegetation communities. LCWA shall also implement buffer zones to protect species-status species, including habitat structures, from direct herbicide contact and drift.	To be implemented during Program construction/activities	LCWA
<b>MM-BIO-37-Restoration Techniques</b>	LCWA shall consider controlling large areas of black mustard, ripgut brome, and poison hemlock in phases instead of removing all vegetation at one time. Non-native vegetation could support wildlife such as birds, small mammals, small frogs, and snakes, which could be displaced if non-native vegetation is completely removed and native vegetation has yet to be restored. Non-native vegetation should remain in place to the extent feasible to support wildlife until seeded or planted native vegetation	To be implemented during Program construction/activities	LCWA

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	reaches an appropriate size, density, and abundance.		
<b>MM-BIO-38-Impacts to Wildlife</b>	LCWA shall address CDFW's concerns with the DPEIR's jurisdictional delineation described under <b>Comment #6 – Jurisdictional Delineation</b> (page 12).	Prior to Program construction/activities	LCWA
<b>MM-BIO-39-Impacts to Wildlife</b>	LCWA shall clarify/discuss whether the new office at the Pumpkin Patch site will conflict with restoration of the site and potentially impact Belding's savannah sparrows (i.e. noise level, increased human activity) in the Program Area.	Prior to Program construction/activities	LCWA
<b>MM-BIO-40-Impacts to Plants and wildlife</b>	LCWA shall reevaluate long-term conceptual plans, especially for the South Area (e.g. Figure 2-14) to maximize vegetation community diversity, not only habitat types. Upland habitats should be resilient to 1.7 and 3.5 ft. of sea level rise. Additional details found under <b>Comment #8 – Plan Alternatives</b> (page 13).	Prior to Program construction/activities	LCWA
<b>MM-BIO-41-Impacts to Plants and wildlife</b>	The DPEIR proposes a Program that will constantly modify the LCWA over the next 20 years. Erecting, lowering, breaching, removing berms or flood walls after or during restoration may impact and disrupt biological resources and water flow. LCWA shall minimize disruptive activities and consider workflows (i.e. Table ES-1, ES-2, ES-3, ES-4) that strategically schedules landscape and waterflow-altering projects for the near-term to the extent possible.	Prior to Program construction/activities	LCWA
<b>MM-BIO-42-Impacts to Plants and wildlife</b>	Assess and discuss potential impacts to biological resources up and downstream of the LCWC along the San Gabriel River because the Program could lead to a drop in water level. A review of CNDDDB found western spadefoot, tricolored black bird, and western pond turtle, upstream of the LCWC.	Prior to Program construction/activities	LCWA

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<b>MM-BIO-43-Impacts to Plants and wildlife</b>	Clearly show where the Seal Beach Residential Project and Haynes Generating Station Intake Channel Infill Project will occur in Program maps, and implement Mitigation Measures for burrowing owl ( <b>MM-BIO-8</b> and <b>9</b> ) and Pacific green sea turtle ( <b>MM-BIO-14</b> and <b>15</b> ) because there may be cumulative impacts to wildlife.	Prior to Program construction/activities	LCWA
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