



STATE OF CALIFORNIA
DEPARTMENT OF FISH AND WILDLIFE

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March 2, 2026

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Subject: Notice of Preparation and Initial Study of a Draft Programmatic Environmental Impact Report for the Aliso Creek Estuary Restoration Plan Project, SCH No. 2026010462, Orange County, CA

Dear Shaveta Sharma:

The California Department of Fish and Wildlife (CDFW) reviewed the Notice of Preparation (NOP) and Initial Study from City of Laguna Beach (City) for the Aliso Creek Estuary Restoration Plan Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines¹.

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, CDFW appreciates 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.

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.
Conserving California's Wildlife Since 1870

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 2

CDFW 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, subd. (a) & 1802; Pub. Resources Code, § 21070; 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 (Fish & G. Code, § 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 fish and wildlife resources.

CDFW may also act 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. As proposed, for example, the Project may be subject to CDFW's 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 law² of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 *et seq.*) or the Native Plant Protection Act (NPPA; Fish & G. Code, § 1900 *et seq.*), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

CDFW also administers the Natural Community Conservation Planning (NCCP) program, a California regional habitat conservation planning program (Fish and Game Code 2800 *et seq.*). Although the City of Laguna Beach (City) is not a permitted jurisdiction or a participating entity, the City owns lands that are within the County of Orange Central and Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan (Central/Coastal NCCP/HCP).

Project Description Summary

Proponent: The City of Laguna Beach (City)

² "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 3

Objective: The Project proposes to restore Aliso Creek Estuary by removing artificial fill, widening the channelized watercourse, creating new functional wetland habitats, improving water quality, and returning the estuary to its natural, “intermittently open” condition. The Aliso Creek Estuary is currently a degraded, narrow-channelized water course that flows from Aliso Canyon to the ocean through the Coast Highway Bridge. The proposed Project would expand the channel to restore its ecological function, demolish the existing beach overflow parking lot, construct a new multi-modal facility, install landscaping, and reconstruct the existing play area and tot lot.

The Draft Environmental Impact Report (DEIR) associated with the Project will analyze effects of implementing the Restoration Site Plan. The Plan proposes new park facilities including an interpretive loop trail with seating and viewing areas, a pedestrian bridge spanning the restored wetland, an overlook for guided educational tours, and a Public Access Plan. This Public Access Plan encourages multiple modes of transportation through the restored area through a “MultiModal Mobility Hub”. This design is in alignment with the City’s Parking and Transportation Demand Management Strategy (2023), as well as visitor management policies in the City’s General Plan and Local Coastal Plan (Land Use Element Goal 4). In summary these strategies emphasize satellite parking outside the City or in peripheral areas to accommodate visitors during peak periods, coupled with heightened mobility through shuttles and mini-transit systems, with the goal that fewer cars enter the City.

Location: The Project site encompasses an existing estuary located at the mouth of Aliso Creek at the Pacific Ocean in South Laguna Beach, California. Specifically, the Project site is located between Country Club Drive and South Coast Highway (see Figure 1). The Project site is surrounded by urban development, including South Coast Water District’s (SCWD) maintenance facilities located to the north across Country Club Drive, housing development to the south, and the Ranch Resort and Golf Course immediately upstream of the project site.

Biological Setting: The Project site itself is undeveloped and is contiguous to open space and conservation areas northeast of the Project site. Aliso Creek runs through the golf course and into the Aliso and Woods Canyon Wilderness Park. According to the City of Laguna Beach Zoning Map and General Plan Land Use Map, the Project site is zoned for Recreation (City of Laguna Beach 2012b, 2012c). The Project site vicinity is urbanized and developed; however, the existing undeveloped, open space areas may contain a variety of sensitive habitats, wildlife, and plant species. Notably, the Project site also includes open space areas

Shaveta Sharma
 City of Laguna Beach
 March 2, 2026
 Page 4

designated as Existing Use Areas within the Central/Coastal NCCP/HCP. These open space areas may currently function as valuable wildlife corridors, migratory bird stopovers, and refugia for several sensitive species. Per the Conceptual Restoration Plan Appendix C, CNDDDB List of Special Status Species (March 2018), the Biological Technical Report prepared for the adjacent SCWD Lift Station No. 2 Replacement Project referenced in the NOP, and a desk review of the California Natural Diversity Data Base (CNDDDB), the recorded focal species that are recognized in the Central/Coastal NCCP/HCP and have potential to occur within the vicinity of the Project site include the coastal California gnatcatcher (*Poliioptila californica californica*; CDFW Species of Special Concern (SSC), federal Endangered Species Act (ESA) listed-Threatened).

Per the Conceptual Restoration Plan Appendix C and desk review of CNDDDB the following special status species have potential to occur on site;

Birds:

- California least tern (*Sternula antillarum browni*; CESA listed–Endangered; ESA listed–Endangered; CDFW Fully Protected)
- Western snowy plover (*Charadrius alexandrinus nivosus*; CESA listed–Threatened; ESA listed–Threatened; CDFW Species of Special Concern)
- Cooper’s hawk (*Accipiter cooperii*; CDFW Watch List)
- Sharp-shinned hawk (*Accipiter striatus*; CDFW Watch List)
- California gull (*Larus californicus*; CDFW Watch List)
- Long-billed curlew (*Numenius americanus*; CDFW Watch List)
- Double-crested cormorant (*Phalacrocorax auritus*; CDFW Watch List)

Plants:

- Southern tarplant (*Centromadia parryi ssp. australis*; California Native Plant Society (CNPS Rank 1B.1)
- Intermediate mariposa lily (*Calochortus weedii var. intermedius*; CNPS Rank 1B.2)

Invertebrates:

- Monarch – California overwintering population (*Danaus plexippus*)
- Crotch’s bumble bee (*Bombus crotchii*; CESA listed- Candidate; California Terrestrial and Vernal Pool Invertebrates of Conservation Priority)

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 5

Reptiles:

- Western pond turtle (*Emys marmorata*; CDFW Species of Special Concern)

Amphibians:

- Arroyo toad (*Anaxyrus californicus*; CESA listed–Endangered; ESA listed–Endangered; CDFW Species of Special Concern)

Fish:

- Tidewater goby (*Eucyclogobius newberryi*; ESA listed–Endangered; CDFW Species of Special Concern)

Additionally, Southern California Distinct Population Segment of steelhead (*Oncorhynchus mykiss irideus*; ESA listed–Endangered) have historically occurred in Aliso Creek and the lower Aliso Creek is recognized by CDFW as historic steelhead habitat (USACOE 2017), with observations as recent as 2018.

Project History: CDFW's South Coast Cutting the Green Tape Coordinator, Christian Romberger, has participated in meetings for the Southern California Wetlands Recovery Grant Program (SCWRGP) hosted by the California State Coastal Commission. While CDFW attends the SCWRGP meetings for early scoping of grant projects, we look forward to continuing Project specific coordination and participating in the Coordinated Permitting Process as described in the NOP. We welcome the opportunity to support discussions related to permitting pathways and mitigation considerations as the Project advances through environmental review and to final design.

Comments and Recommendations

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources and to ensure Project consistency with regional conservation objectives in the County of Orange Central and Coastal Subregion NCCP/HCP.

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 6

Specific Comments

1. Consistency with Regional Plans. CDFW issued NCCP Approval and Take authorization for the County of Orange Central and Coastal Subregion NCCP/HCP per section 2800, *et seq.*, of the California Fish and Game Code on July 17, 1996. The Central/Coastal NCCP/HCP establishes a multiple species conservation program to minimize and mitigate habitat loss and provides for the incidental take of covered species in association with activities covered under the permit. Compliance and consideration of approved regional habitat plans, such as the Central/Coastal NCCP/HCP, is required by CEQA. Specifically, section 15125(d) of the CEQA Guidelines requires that the CEQA document discuss any inconsistencies between a proposed Project and applicable general plans and regional plans, including habitat conservation plans and natural community conservation plans. Permittees should demonstrate that proposed actions are consistent with the provisions and policies of the Central/Coastal NCCP/HCP or if not, provide justification for why and disclosure as to how the project may impact the goals of the NCCP/HCP. Per the NOP's Initial Study section on Biological Resources, the City commits to ensuring the DEIR will assess the proposed Project's inconsistencies with the Central/Coastal NCCP/HCP provisions.

Notably, the Orange County Central Coastal NCCP/HCP does not identify any restrictions on landowner uses, nor specify any local requirements, regulations, or management actions that must be applied by local governments to lands designated as Existing Use Area. However, these lands do not receive any authorization for take coverage, and therefore, when a change in existing land use is proposed, landowners must obtain authorization from CDFW, the United States Fish and Wildlife Service (USFWS). Therefore, CDFW recommends that the City engage in Project scoping prior to the DEIR's release, to address any potential conflicts with the NCCP/HCP prior to the document's public review period. We look forward to working with the City to ensure the Project's alignment with regional planning efforts

2. Crotch's bumble bee. The DEIR should discuss and analyze potential impacts to Crotch's bumble bee because the Project site may contain suitable foraging or nesting habitat for the bee (Xerces 2025). Crotch's bumble bee can use a variety of upland land cover types for foraging and often nest underground, sometimes occupying abandoned rodent burrows (Hatfield et al., 2015). If Crotch's bumble bee are using burrows on the Project site for nesting, direct impacts could result from

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 7

ground-disturbing activities, which could lead to death or injury of adults, eggs, and larva, burrow collapse, nest abandonment, and reduced nest success. Additionally, the Project may result in temporal or permanent loss of foraging habitat. Any use of pesticides on site also has the potential to directly harm or kill Crotch's bumble bee.

- a. Protection Status. The California Fish and Game Commission accepted a petition to list the Crotch's bumble bee as threatened or endangered under CESA, determining the listing "may be warranted" and advancing the species to the candidacy stage of the CESA listing process. Crotch's bumble bee is granted full protection under CESA. Take of any endangered, threatened, candidate species that results from the Project is prohibited, except as authorized by State law (Fish & G. Code, §§ 86, 2062, 2067, 2068, 2080, 2085; Cal. Code Regs., tit. 14, §786.9). In addition, Crotch's bumble bee has a State ranking of S1/S2. This means that Crotch's bumble bee is considered critically imperiled or imperiled and is extremely rare (often five or fewer populations). Crotch's bumble bee is also listed as an invertebrate of conservation priority under the [Terrestrial and Vernal Pool Inverts of Conservation Priority List](#)³. Crotch's bumble bee also meets the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). Therefore, take of Crotch's bumble bee could require a mandatory finding of significance by the City (CEQA Guidelines, § 1565).
- b. Surveys and Disclosure. CDFW recommends the Project Proponent retain a qualified biologist familiar with the species to survey the Project site for Crotch's bumble bee and suitable habitat. Surveys should be conducted during the flying season when the species is most likely to be detected above ground, between March 1 to September 1 (Thorp et al. 1983). Surveys should also occur within one year prior to vegetation removal and/or ground disturbance and adhere to the [Survey Considerations for CESA Candidate Bumble Bee Species](#)⁴. The DEIR should provide full disclosure of the presence of Crotch's bumble bee and the Project's potential impact on Crotch's bumble bee.
- c. Avoidance, Minimization, and Mitigation. If the site is determined to be occupied by Crotch's bumble bee, the DEIR should include measures to avoid impacts on Crotch's bumble bee. If Crotch's bumble bee is present, the

³ <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=149499&inline>

⁴ <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline>

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 8

qualified biologist should identify the location of all nests in or adjacent to the Project site. If nests are identified, 50-foot no-disturbance buffer zones should be established around nests to reduce the risk of take. Additionally, the DEIR should require consultation with CDFW to determine if a CESA Incidental Take Permit (ITP) is required. In addition, the Project Proponent should provide compensatory mitigation for removal or damage to any floral resource associated with Crotch's bumble bee. Floral resources should be replaced as close to their original location as is feasible.

3. Endangered Species Act Listed Fish Species. According to CNDDDB, there are multiple historic observations of tidewater goby and southern steelhead within the Project site. The potential for impacts to these fish species are unclear from the NOP, and the Conceptual Restoration Plan only vaguely describes actions in support of species translocation or recovery at this site. Tidewater gobies spend all of their life stages in lagoons, estuaries, and river mouths (USFWS 2005). Southern California steelhead are anadromous fish that will spawn within a creek, migrate downstream for smoltification, migrate to the ocean, and return to its spawning grounds as a mature adult (NMFS 2012). Project activities may result in temporary or permanent habitat modification, direct injury, reduced capacity, and population decline.

The DEIR should analyze and discuss the Project's potential impact on fish species population, habitat, substrate, and passage. The DEIR should also analyze the Project's effect on the hydrology and hydraulics (velocity, depth, and temperature) of potentially impacted creeks within the Project area and how those effects may impact special status fish species. The Project activities should be conditioned to fully avoid all impacts to tidewater goby and southern California steelhead. No work should occur during the winter rainy season, which typically occurs between December 1 through March 31 (NMFS 2012). Additionally, no work should occur during peak breeding activities for tidewater goby, April 1 through June 31, and during November 1 through June 15 when periods of high flow and steelhead smolt are likely to be in the area during periods of receding flows.

Tidewater goby and southern California steelhead are protected under the ESA and meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines CEQA§ 15065). In addition, southern California steelhead are designated as a candidate species under CESA and afforded full protection. CEQA provides

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 9

protection not only for ESA-listed 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. Take of SSC could require a mandatory finding of significance by the State Parks (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 USFWS. 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 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.

4. Coastal California Gnatcatcher. Gnatcatchers have been observed within the Project site and in adjacent habitat. The DEIR should include a complete, recent habitat assessment for suitable habitat and the Project Proponent should conduct protocol-level surveys within any suitable habitat following the USFWS [Survey Guidelines for the Coastal California Gnatcatcher](#)⁵ (USFWS 1997) to confirm the presence or absence. If gnatcatcher is detected during surveys, CDFW recommends the City consult with USFWS to identify appropriate avoidance, minimization, and mitigation measures. The DEIR must analyze and disclose potential direct, indirect, and cumulative impacts to species and their habitat.
5. Potential Increase in Human-Wildlife Interactions and Conflicts. CDFW recommends that the DEIR evaluate the potential for increased human-wildlife interactions and conflict that may result from restoration activities designed to enhance estuarine and riparian habitats. Habitat restoration is expected to improve ecological function and may attract or support increased use by special-status species, including state- and federally listed species, Species of Special Concern, and Fully Protected species[JT1.1][PP1.2]. While such outcomes are consistent with regional plan and restoration objectives, the DEIR should disclose that increased wildlife presence in

⁵ <https://www.fws.gov/sites/default/files/documents/survey-protocol-for-coastal-california-gnatcatcher.pdf>

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 10

proximity to public access areas (e.g., trails, beach use areas, viewing platforms, or adjacent development) could result in indirect impacts to both wildlife and the public.

The DEIR should evaluate whether restored habitats are likely to increase occupancy, breeding, foraging, or roosting by special-status species and other sensitive wildlife and assess human-wildlife conflict risks such as disturbance, nest abandonment, trampling, domestic animal interactions, feeding of wildlife, vandalism, or other forms of anthropogenic pressure that could compromise restoration success or species recovery. The DEIR should identify management strategies that will be implemented to reduce conflict, such as seasonal access restrictions, fencing or symbolic barriers, signage and public education, dog control enforcement, buffer establishment, habitat zoning, monitoring triggers, and adaptive management protocols. The DEIR should describe how long-term management of restored habitat will address species-specific requirements in consultation with wildlife agencies, including monitoring frequency, performance standards, and coordination with resource agencies where take authorization or other permits may be required. The Final EIR and restoration plan should clearly define the entity responsible for long-term management and funding, establish measurable biological performance criteria, and outline a transparent adaptive management process to address unanticipated increases in human-wildlife conflict.

Again, CDFW welcomes coordination with the City during preparation of the DEIR to assist in developing robust management guidelines and identifying appropriate regulatory pathways for future permitting needs, including but not limited to potential authorization under the CESA, lake and streambed alteration requirements, or other applicable provisions of the Fish and Game Code. Early and ongoing consultation will help ensure that restoration objectives are achieved while minimizing unintended adverse effects to sensitive species and their habitats.

6. Recreational Pressures on Restored Open Space. The DEIR should include a detailed analysis of potential direct, indirect, and cumulative impacts to biological resources associated with increased pressures from recreation and human use, both to the restored area and existing Open Space areas. In particular, the DEIR should address potential for creation or expansion of unauthorized trails, increased recreational pressures (e.g., from unauthorized motorized vehicles); and associated disturbance to sensitive habitats, and/or special status species. CDFW recommends the DEIR develop

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 11

measures to avoid, minimize, and mitigate these impacts, including implementation of a management plan that is consistent with the Central/Coastal NCCP/HCP requirements and conservation objectives.

7. Impacts to Sensitive Habitat from Artificial Light. CDFW recommends the DEIR include a mitigation measure or measures which require the City to adopt an artificial light policy and/or mitigate the impacts of artificial light as part of the Final Restoration Plan. Artificial light at night (ALAN) is increasing in extent and intensity across the globe. It has been shown to interfere with animal sensory systems, orientation, and distribution, with the potential to cause significant ecological impacts (Barrientos et al. 2023). ALAN also causes changes in reproductive timing or success of birds in response to light leading to phenological mismatches and lower fitness (Barrientos et al. 2023). The impacts of light pollution also cause responses from biodiversity that include advance of spring leaf budding in deciduous trees, inhibition of mating insects under artificial light, wildlife shifts to darker/brighter areas where perceived predation risk is lower, and avoidance of lit wildlife crossings by mammals creating a barrier effect for linear infrastructure (Barrientos et al. 2023). The issue of light pollution and the associated impacts to wildlife should be considered when planning for construction of paved and un-paved trails and sidewalks for recreation and access within the Project site due to its inclusion and adjacency to Central/Coastal NCCP/HCP.

General Comments

1. Disclosure. The DEIR should provide an adequate, complete, and detailed disclosure about the effects which a proposed project is likely to have on the environment (Pub. Resources Code, § 20161; CEQA Guidelines, § 15151). Such disclosure is necessary so CDFW may provide comments on the adequacy of proposed avoidance, minimization, or mitigation measures, as well as assess the significance of the specific impact relative to plant and wildlife species impacted (e.g., current range, distribution, population trends, and connectivity).
2. Project Description and Alternatives. To enable adequate review and comment on the proposed Project from the standpoint of the protection of fish, wildlife, and plants, CDFW recommends the following information be included in the DEIR.
 - a. A complete discussion of the purpose and need for, and description of the proposed Project.

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 12

- b. A range of feasible alternatives to the Project location to avoid or otherwise minimize direct and indirect impacts on sensitive biological resources and wildlife movement areas. CDFW recommends the City select Project designs and alternatives that would avoid or otherwise minimize direct and indirect impacts on biological resources. CDFW also recommends the City consider establishing appropriate setbacks from sensitive and special status biological resources. Setbacks should not be impacted by ground disturbance or hydrological changes from any future Project-related construction, activities, maintenance, and development. As a general rule, CDFW recommends reducing or clustering a development footprint to retain unobstructed spaces for vegetation and wildlife and provide connections for wildlife between properties and minimize obstacles to open space.
 - c. Project alternatives should be thoroughly evaluated, even if an alternative would impede, to some degree, the attainment of the Project objectives or would be more costly (CEQA Guidelines, § 15126.6). The DEIR shall include sufficient information about each alternative to allow meaningful evaluation, public participation, analysis, and comparison with the proposed Project (CEQA Guidelines, § 15126.6).
 - d. Where the Project may impact aquatic and riparian resources, CDFW recommends the City select Project designs and alternatives that would fully avoid impacts to such resources. CDFW also recommends an alternative that would not impede, alter, or otherwise modify existing surface flow, watercourse and meander, and water-dependent ecosystems and natural communities. Project designs should consider elevated crossings to avoid channelizing or narrowing of watercourses. Any modifications to a river, creek, or stream may cause or magnify upstream bank erosion, channel incision, and drop in water level, which may cause the watercourse to alter its course of flow.
3. Biological Baseline Assessment. An adequate biological resources assessment should provide a complete assessment and impact analysis of the flora and fauna within and adjacent to the Project site and where the Project may result in ground disturbance. The assessment and analysis should place emphasis on identifying endangered, threatened, rare, and sensitive species; regionally and locally unique species; and sensitive habitats. An impact analysis will aid in determining the Project's potential

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 13

direct, indirect, and cumulative biological impacts, as well as specific mitigation or avoidance measures necessary to offset those impacts. CDFW also considers impacts to SSC a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures. The DEIR should include the following information.

- a. Information on the regional setting is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines, § 15125(c)). The DEIR should include measures to fully avoid and otherwise protect Sensitive Natural Communities. CDFW considers Sensitive Natural Communities as threatened habitats having both regional and local significance. Natural communities, alliances, and associations with a State-wide rarity ranking of S1, S2, and S3 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by visiting the [Vegetation Classification and Mapping Program - Natural Communities webpage](#)⁶.
- b. A thorough, recent, floristic-based assessment of special status plants and natural communities following CDFW's [Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities](#)⁷. Botanical field surveys should be comprehensive over the entire Project site, including areas that will be directly or indirectly impacted by the Project. Adjoining properties should also be surveyed where direct or indirect Project effects could occur, such as those from fuel modification, herbicide application, invasive species, and altered hydrology. Botanical field surveys should be conducted in the field at the times of year when plants will be both evident and identifiable. Usually, this is during flowering or fruiting. Botanical field survey visits should be spaced throughout the growing season to accurately determine what plants exist in the Project site. This usually involves multiple visits to the Project site (e.g., in early, mid, and late season) to capture the floristic diversity at a level necessary to determine if special status plants are present.

⁶ <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities>

⁷ <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 14

- c. Floristic alliance- and/or association-based mapping and vegetation impact assessments conducted on the Project site and within adjacent areas. The [Manual of California Vegetation](#)⁸, second edition, (Sawyer, Keeler-Wolf, & Evens, 2009) should also be used to inform this mapping and assessment. Adjoining habitat areas should be included in this assessment where the Project's construction and activities could lead to direct or indirect impacts offsite.
- d. A complete and recent assessment of the biological resources associated with each habitat type on the Project site and within adjacent areas. A full literature review includes but is not limited to CDFW's [CNDDDB](#)⁹. The CNDDDB should be accessed to obtain current information on any previously reported sensitive species and habitat. An assessment should include a minimum nine-quadrangle search of the CNDDDB to determine a list of species potentially present on the Project site. A nine-quadrangle search should be provided in the Project's CEQA document for adequate disclosure of the Project's potential impact on biological resources.
- e. A complete, recent, assessment of endangered, rare, or threatened species and other sensitive species within the Project site and adjacent areas, including SSC and California Fully Protected Species (Fish & G. Code, §§ 3511, 4700, 5050, and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Seasonal variations in use of the Project site should also be addressed such as wintering, roosting, nesting, and foraging habitat. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, may be required if suitable habitat is present. See [CDFW's Survey and Monitoring Protocols and Guidelines webpage](#)¹⁰ for established survey protocol. Acceptable species-specific survey procedures may be developed in consultation with CDFW and USFWS.

⁸ <https://vegetation.cnps.org/>

⁹ <https://wildlife.ca.gov/Data/CNDDDB>

¹⁰ <https://wildlife.ca.gov/conservation/survey-protocols>

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 15

- f. A recent wildlife and rare plant survey. A lack of records in the CNDDDB does not mean that rare, threatened, or endangered plants and wildlife do not occur. Field verification for the presence or absence of sensitive species is necessary to provide a complete biological assessment for adequate CEQA review (CEQA Guidelines, § 15003(i)). CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if Project implementation build out could occur over a protracted time frame or in phases.
4. Direct and Indirect Impacts on Biological Resources. The DEIR should provide a thorough discussion of direct and indirect impacts expected to affect biological resources with specific measures to offset such impacts. The DEIR should address the following.
 - a. A discussion of potential impacts from lighting, noise, temporary and permanent human activity, and exotic species, and identification of any mitigation measures. A discussion regarding Project-related indirect impacts on biological resources. These include resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with a Natural Community Conservation Plan (Fish & G. Code, § 2800 et. seq.)). The DEIR should fully analyze and disclose potential effects to Aliso Creeks' water levels, habitat quality, and ecological function.
 - b. A discussion of both the short-term and long-term effects of the Project on species population distribution and concentration, as well as alterations of the ecosystem supporting those species impacted (CEQA Guidelines, § 15126.2(a)).
 - c. Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in areas adjacent to the Project, should be fully analyzed and discussed in the DEIR.
 - d. A discussion of post-Project fate of drainage patterns, surface flows, and soil erosion and/or sedimentation in streams and water bodies. The discussion should also address the potential water extraction activities and the potential resulting

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 16

impacts on habitat supported by the groundwater. Measures to mitigate such impacts should be included.

- e. An analysis of impacts from proposed changes to land use designations and zoning, and existing land use designation and zoning located nearby or adjacent to natural areas that may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the DEIR.

5. Cumulative Impact. Cumulative impacts on biological resources can result from projects which are individually insignificant but collectively significant. “The Project, when considered collectively with prior, concurrent, and probable future projects, may have a significant cumulative effect on biological resources. These include not only development projects but also upstream infrastructure improvements, channel modifications, water management activities, habitat restoration initiatives, and ministerial or maintenance projects that may incrementally alter habitat conditions over time.

Accordingly, CDFW recommends the DEIR thoroughly evaluate the Project's potential contribution to cumulative impacts on biological resources in the context of upstream and related actions, including prior and proposed restoration efforts (e.g. Arundo removal projects in the upper reaches of Aliso Creek) and infrastructures improvements, ministerial or maintenance projects (e.g. North Coast Interceptor Reach Replacement Project), as well as other flood control, transportation, utility, or drainage projects within the same watershed and including the SCWD Lift Station No. 2 Project referenced in the NOP. Even where such projects are intended to improve hydraulic performance, public safety, or habitat conditions, their combined effects— together with the Project—may influence hydrology, sediment transport, habitat connectivity, species movement corridors, and the viability of sensitive biological communities.

The Project may have the potential to substantially reduce the number or restrict the range of endangered, rare, or threatened species. Species that may be impacted by the Project include, but are not limited to, the biological resources described in this letter. The DEIR should assess whether incremental or temporary habitat loss, fragmentation, hydrologic changes, or construction disturbance, when combined with other projects, could cumulatively diminish habitat function or wildlife movement. The

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 17

City's conclusions regarding the significance of the Project's cumulative impact should be justified and supported by evidence to make those conclusions (CEQA Guidelines section § 15130(a)(2)).

6. Mitigation Measures. Public agencies have a duty under CEQA to prevent significant, avoidable damage to the environment by requiring changes in a project through the use of feasible alternatives or mitigation measures (CEQA Guidelines, §§ 15002(a)(3), 15021). Pursuant to CEQA Guidelines section 15126.4, an environmental document shall describe feasible measures which could mitigate impacts below a significant level under CEQA. Mitigation measures must be feasible, effective, implementable, and fully enforceable/imposed by the lead agency through permit conditions, agreements, or other legally binding instruments (Pub. Resources Code, § 21081.6(b); CEQA Guidelines, § 15126.4).
 - a. The DEIR should provide mitigation measures that are specific and detailed (i.e., responsible party, timing, specific actions, location) in order for a mitigation measure to be fully enforceable and implemented successfully via a mitigation monitoring and/or reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097).
 - b. If a proposed mitigation measure would cause one or more significant effects, in addition to impacts caused by the proposed Project, the DEIR should include a discussion of the effects of proposed mitigation measures (CEQA Guidelines, § 15126.4(a)(1)). In that regard, the DEIR should provide an adequate, complete, and detailed disclosure about the Project's proposed mitigation measure(s). Adequate disclosure is necessary so CDFW may assess the potential impacts of proposed mitigation measures.
7. Compensatory Mitigation. The DEIR should include compensatory mitigation measures for the Project's significant impacts (direct and/or through habitat modification) to sensitive and special status plants, animals, and habitats. Mitigation measures should emphasize avoidance and minimization of Project-related impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible or would not be biologically viable and therefore inadequate to mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. Areas proposed as mitigation lands should be protected in perpetuity with

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 18

a conservation easement and financial assurance and dedicated to a qualified entity for long-term management and monitoring.

8. Long-term Management of Mitigation Lands. For any proposed mitigation lands, the DEIR should include measures to protect the targeted habitat values in perpetuity. The mitigation should offset Project-induced qualitative and quantitative losses of biological resources. Issues that should be addressed include (but are not limited to) restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, and increased human intrusion. An appropriate endowment should be set aside to provide for long-term management of mitigation lands.
9. CESA Incidental Take Permit and Restoration Management Permit. CDFW considers adverse impacts to a species protected by CESA to be significant. Take of any endangered, threatened, candidate species, or NPPA-listed plant species that results from the Project is prohibited, except as authorized by state law (Fish & G. Code §§ 1670, 2080[RC2.1], 2085; Cal. Code Regs., tit. 14, §786.9). Consequently, if the Project or any Project-related activity will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, CDFW recommends that the Project proponent seek appropriate take authorization under CESA prior to implementing the Project. Appropriate authorization from CDFW may include an Incidental Take Permit (ITP), a consistency determination in certain circumstances, (Fish & G. Code, §§ 2080.1, 2081, subds. (b) and (c)), or a Restoration Management Permit (RMP) (Fish & G. Code §§ 1670–1673), among other options. The RMP Act, enacted through Assembly Bill 1581 as part of California's "Cutting the Green Tape" initiative, authorizes CDFW to issue Restoration Management Permits to streamline permitting for qualifying habitat restoration projects. . Potential streamlined authorizations include permitting take of CESA-listed species, take of Fully Protected species, take of plant species which are designated as "rare" pursuant to the Native Plant Protection Act, take of other nonspecial-status species, and authorization of impacts which would otherwise be subject to a Lake and Streambed Alteration Agreement. Under the RMP Act, a "qualifying restoration project" must have the primary purpose of restoring native species or habitat and result in a substantial net benefit to native species or habitat. Projects must have a substantial net benefit, above and beyond restoring baseline conditions as defined in Fish & G. Code §§ 1671.

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 19

Early consultation with CDFW is strongly encouraged, as significant modification to the Project and mitigation measures may be required to obtain CESA take authorizations. To support CDFW's potential issuance of either an ITP or an RMP, the DEIR comprehensively evaluate all Project impacts to CESA-listed species and specify a mitigation, monitoring, and reporting program that will meet the requirements of an ITP. If the City intends to pursue an RMP, the DEIR should clearly identify restoration objectives as the primary project purpose and demonstrate net ecological benefit with enforceable mitigation, monitoring, and adaptive management measures that will meet the requirements of an RMP.

10. Salvage, Relocation and Translocation of Plants and Animal Species. Salvage, relocation and translocation require the collection, handling, capturing or possession of wildlife and/or plants with the goal of moving or removing them from one location and permanently moving them to a new location. CDFW generally does not support the use of relocation or translocation as mitigation measure for unavoidable impacts to endangered, rare, or threatened plants and animals. These efforts are often not monitored over the long-term and successful outcomes are dubious. CDFW has found that permanent preservation and management of habitat to support affected species is often a more effective long-term strategy for conserving plants and animals and their habitats.
11. Scientific Collecting Permit and Voucher Collecting Permit. A Scientific Collecting Permit would be necessary if there is anticipation to capture and relocate wildlife. Pursuant to the California Code of Regulations, title 14, section 650, qualified biologist(s) must obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project-related 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). 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

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 20

activities (Cal. Code Regs., tit. 14, § 650). For more information, please see CDFW's [Scientific Collecting Permit webpage](#)¹¹.

A voucher collection permit is required to collect state-listed plant species for identification purposes during field surveys, or to collect voucher specimens to document a newly-discovered or previously unvouchered occurrence of a state-listed plant. There is no charge to apply for a voucher collection permit. Anyone who collects scientific plant specimens of state-listed species, or who may encounter a state-listed species during field surveys should have a plant voucher collection permit. To apply for a Voucher Collecting Permit please see CDFW's [Voucher Collecting Permit webpage](#)¹².

12. Lake and Streambed Alteration. CDFW has regulatory authority over activities in streams that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of any river, stream, or lake or use material from a river, stream, or lake. 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. Based on this notification and other information, CDFW determines whether a Lake and Streambed Alteration Agreement (LSAA) with the applicant is required prior to conducting the proposed activities. CDFW's issuance of a LSAA for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. CDFW recommends that the City state in the DEIR that a notification is necessary. A Notification package for a LSAA may be obtained by accessing CDFW's [Lake and Streambed Alteration Program webpage](#)¹³.
13. Wetland Resources. CDFW, as described in Fish and Game Code section 703(a), is guided by the [Fish and Game Commission's \(Commission\) policies](#)¹⁴. Through its Wetlands Resources policy, the Commission "...seek[s] to provide for the protection, preservation, restoration, enhancement, and expansion of wetland habitat in California" (California Fish and Game Commission, 2005). It is the policy of the Commission to strongly discourage development in or conversion of wetlands. It opposes, consistent with its legal authority, any development or conversion that would

¹¹ <https://wildlife.ca.gov/Licensing/Scientific-Collecting>

¹² <https://wildlife.ca.gov/Conservation/Plants/Permits>

¹³ <http://www.wildlife.ca.gov/Conservation/LSA>

¹⁴ <https://fgc.ca.gov/About/Policies/Miscellaneous>

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 21

result in a reduction of wetland acreage or wetland habitat values. To that end, the Commission opposes wetland development proposals unless, at a minimum, project mitigation assures there will be 'no net loss' of either wetland habitat values or acreage. The Commission strongly prefers mitigation which would achieve expansion of wetland acreage and enhancement of wetland habitat values."

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

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 22

14. Use of Native Plants and Trees. CDFW recommends the City require the Project Applicant to provide a native plant palette for the Project. The Project's landscaping plan should be disclosed and evaluated in the DEIR for potential impacts on biological resources such as natural communities adjacent to the Project site (e.g., introducing non-native, invasive species). CDFW supports the use of native plants for the Project, especially considering the Project's location adjacent to protected open space and natural areas. CDFW strongly recommends avoiding non-native, invasive species for landscaping and restoration, particularly any species listed as 'Moderate', 'High', 'Limited', and 'Watch' by the [California Invasive Plant Council](#)¹⁵ CDFW supports the use of native species found in naturally occurring plant communities within or adjacent to the Project site. In addition, CDFW supports planting native species of trees, such as oaks (*Quercus* genus), when appropriate, and understory vegetation (e.g., ground cover, vines, subshrubs, and shrubs) that create habitat and provide a food source for birds. CDFW recommends retaining any standing, dead, or dying tree (snags) where possible because snags provide perching and nesting habitat for birds and raptors. Finally, CDFW supports planting species of vegetation with high insect and pollinator value.

Environmental Data

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to CNDDDB. The [CNDDDB website](#)¹⁶ provides directions regarding the types of information that should be reported and allows on-line submittal of field survey forms.

In addition, information on special status native plant populations and sensitive natural communities, should be submitted to CDFW's Vegetation Classification and Mapping Program using the [Combined Rapid Assessment and Relevé Form](#)¹⁷.

¹⁵ <https://www.cal-ipc.org/plants/inventory/>

¹⁶ <https://wildlife.ca.gov/Data/CNDDDB>

¹⁷ <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Submit>

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 23

The City should ensure data collected for the preparation of the DEIR is properly submitted.

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 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

CDFW appreciates the opportunity to comment on the NOP to assist the City of Laguna Beach in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Paola Perez, Environmental Scientist, at (858) 354-2413 or Paola.Perez@wildlife.ca.gov.

Sincerely,

Signed by:

AD7D070BCB66466...

Glen M. Lubcke
Environmental Program Manager
South Coast Region

Attachment:

Figure 1. Project Location

cc: California Department of Fish and Wildlife

Glen M. Lubcke, Environmental Program Manager

Jennifer Turner, Senior Environmental Scientist (Supervisor)

Paola Perez, Environmental Scientist

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 24

United States Fish and Wildlife Service

Christine Medak, Fish and Wildlife Biologist

Office of Planning and Research

State.Clearinghouse@opr.ca.gov

REFERENCES

Barrientos et al., 2023. Nearby night lighting, rather than sky glow, is associated with habitat selection by a top predator in human-dominated landscapes. *Philosophical Transactions B*. 378:20220370. Available at:

<https://royalsocietypublishing.org/rstb/article/378/1892/20220370/109411/Nearby-night-lighting-rather-than-sky-glow-is>

California Department of Fish and Wildlife. (2017). *Terrestrial and Vernal Pool Inverts of Conservation Priority List*. Available at:

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=149499&inline>

California Department of Fish and Wildlife. (2021). *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*. Available at:

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>

California Department of Fish and Game. (2025). *California Natural Diversity Database* (webpage). Available at: <https://wildlife.ca.gov/Data/CNDDB>

California Department of Fish and Wildlife. (2025). *Lake and Streambed Alteration Program* (webpage). Available at: <https://wildlife.ca.gov/Conservation/Environmental-Review/LSA>

California Department of Fish and Wildlife. (2025). *Scientific Collecting Permits* (webpage). Available at: <https://wildlife.ca.gov/Licensing/Scientific-Collecting>

California Department of Fish and Wildlife. (2011). *Survey and Monitoring Protocols and Guidelines* (webpage). Available at: <https://wildlife.ca.gov/conservation/survey-protocols>

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 25

California Department of Fish and Wildlife. (2025). *Vegetation Classification and Mapping Program - Natural Communities* (webpage). Available at:
<https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities>

California Department of Fish and Wildlife. (2025). *Voucher Collecting Permit* (webpage). Available at: <https://wildlife.ca.gov/Conservation/Plants/Permits>

California Fish and Game Commission. (2005). *Miscellaneous Policies*. Available at:
<https://fgc.ca.gov/About/Policies/Miscellaneous>

California Invasive Plant Council. (2025). *The Cal-IPC Inventory*. Available at:
<https://www.cal-ipc.org/plants/inventory/>

Hatfield, R., Jepsen, S., Foltz Jordan, S., Blackburn, M., Code, Aimee. (2018). A Petition to the State of California Fish and Game Commission to List Four Species of Bumblebees as Endangered Species. Available at: <https://www.xerces.org/sites/default/files/2019-10/CESA-petition-Bombus-Oct2018.pdf>

Irvine Ranch Water District. (2019). *Syphon Reservoir Improvement Project (State Clearinghouse No. 2019080009)*. CEQA.net. Available at:
<https://ceqanet.lci.ca.gov/2019080009/10>

National Marine Fisheries Service(NMFS). 2012. Southern California Steelhead Recovery Plan. Southwest Region, Protected Resources Division, Long Beach, California. Available from:
https://fsp.sdsu.edu/wpcontent/uploads/2012/02/Southern_California_Steelhead_Recovery_Plan_Summary_Corrected_012712.pdf

Natural Communities Coalition. (2018). *Best Practices for Implementation of Invasive Plant Control for Resource Management on the Nature Reserve of Orange County*. Available at:
[NCC-Approved-Best-Practices-with-2-Letters-06.26.18.pdf](https://www.ncc-coalition.org/wp-content/uploads/2018/06/NCC-Approved-Best-Practices-with-2-Letters-06.26.18.pdf)

County of Orange. (1996). County of Orange Central and Coastal Subregion Natural Community Conservation Plan and Habitat Conservation Plan. Available at:
<https://occonservation.org/wp-content/uploads/2015/04/NCCP-Parts-I-II-Plan.pdf>

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 26

Orange County Transportation Authority. (2016). *OCTA M2 Natural Community Conservation Plan / Habitat Conservation Plan (Final)*. Available at:
<https://www.octa.net/pdf/NCCP%20HCP%20FINAL.pdf>

Sawyer, J. O., Keeler-Wolf, T., & Evens, J. M. (2009). *A Manual of California Vegetation* (Second ed.). Sacramento, CA: California Native Plant Society. Available at:
<https://vegetation.cnps.org/>

Thorp, R. W., Horning, D. S., Jr., & Dunning, L. L. (1983). *Bumble bees and cuckoo bumble bees of California (Hymenoptera: Apidae)*. *Bulletin of the California Insect Survey*, 23, 1–79. Available at: <https://essig.berkeley.edu/documents/cis/cis23.pdf>

United States Fish and Wildlife Service (USFWS). 2005. *Recovery Plan for the Tidewater Goby (Eucyclogobius newberryi)*. Available at:
https://ecos.fws.gov/docs/recovery_plan/051207.pdf

USFWS. (2001). *Survey Guidelines for Least Bell's Vireo (Vireo bellii pusillus)*. Available at:
<https://www.fws.gov/sites/default/files/documents/survey-protocol-for-least-bells-vireo.pdf>

USFWS. (1997). *Survey Protocol for Coastal California Gnatcatcher (Polioptila californica californica)*. Available at: <https://www.fws.gov/sites/default/files/documents/survey-protocol-for-coastal-california-gnatcatcher.pdf>

University of California Natural Reserve System. (2025). *Species Lists – San Joaquin Marsh Reserve*. Available at: <https://sanjoaquin.ucnrs.org/species-lists/>

Xerces Society for Invertebrate Conservation. *Bumble Bee Watch* (online spatial database). (2025). Available at: <https://www.bumblebeewatch.org/>.

Shaveta Sharma
City of Laguna Beach
March 2, 2026
Page 27

Figure 1. Project Location

