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**Subject: Oceano Dunes District Habitat Conservation Plan (HCP)
Recirculated Draft Environmental Impact Report (RDEIR)
State Clearinghouse No.: 2018011012**

Dear Ronnie Glick:

The California Department of Fish and Wildlife (CDFW) received an RDEIR from the California Department of Parks and Recreation (CDPR), as Lead Agency, for the above-referenced revised HCP pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the HCP that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the HCP 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 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 (Id., § 1802.). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public

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.

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agency environmental review efforts, focusing specifically on the HCP covered activities that have the potential to adversely affect 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. As proposed, for example, certain HCP covered activities may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of HCP covered activities 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.), related authorization as provided by the Fish and Game Code will be required.

Fully Protected Species: CDFW has jurisdiction over fully protected species of birds, mammals, amphibians and reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except as follows:

- Take is for necessary scientific research,
- Efforts to recover a fully protected, endangered, or threatened species, live capture, and relocation of a bird species for the protection of livestock, or
- They are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan (Fish & G. Code, §§ 3511, 4700, 5050, & 5515).

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include, sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

Unlisted Species: Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened (E, R, or T) on any State or Federal list to be considered E, R, or T under CEQA. If a species can be shown to meet the criteria for E, R, or T, as specified in the CEQA Guidelines section 15380, CDFW recommends it be fully considered in the environmental analysis for the HCP.

HABITAT CONSERVATION PLAN SUMMARY

Proponent: California Department of Parks and Recreation

Objective: CDPR has prepared a revised HCP to support its application for a federal incidental take permit (ITP) under the federal Endangered Species Act (ESA) for the Pismo State Beach (PSB) and Oceano Dunes State Vehicular Recreation Area

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(ODSVRA); park units which are managed by the Oceano Dunes District. The revised HCP covers 5,005 acres and will allow DPR to operate Oceano Dunes SVRA and Pismo SB in a manner that benefits numerous sensitive species while ensuring consistency with the ESA. The ITP would cover all lawful activities for which CDPR has responsibility within the HCP area that could result in take of covered species, including public use, recreation management, natural and cultural resources management, and park/beach management.

Location: The HCP area includes 5,005 acres of PSB and ODSVRA. The HCP area is bounded by the City of Pismo Beach to the north, the Guadalupe-Nipomo Dunes National Wildlife Refuge to the south, urban and agricultural land to the east and the Pacific Ocean to the west. Primary access to the HCP area is via U.S. Highway 101 and State Route 1.

COMMENTS AND RECOMMENDATIONS

The revised HCP and RDEIR were prepared to support a USFWS ITP for the State endangered and fully protected and federally endangered California least tern (*Sternula antillarum browni*); the State species of special concern and federally threatened western snowy plover (*Anarhynchus nivosus nivosus*); the State species of special concern and federally proposed threatened southwestern pond turtle (*Actinemys pallida*); the State species of special concern and federally threatened California red-legged frog (*Rana draytonii*); the State species of special concern and federally proposed threatened western spadefoot (*Spea hamondii*); and the State species of special concern and federally endangered tidewater goby (*Eucyclogobius newberryi*). The revised HCP and RDEIR also evaluated impacts and provided measures to avoid and minimize take for listed plant species, including the State threatened beach spectaclepod (*Dithyrea maritima*); the State threatened and federally endangered Gambel's watercress (*Nasturtium gambelii*) and La Graciosa thistle (*Cirsium scariosum* var. *loncholepis*); the State and federally endangered marsh sandwort (*Arenaria paludicola*) and Nipomo mesa lupine (*Lupinus nipomensis*); and the State threatened surf thistle (*Cirsium rhothophilum*).

CDFW submitted a comment letter on June 1, 2020 (Attachment 1) in response to the publication of the initial draft HCP and Draft Environmental Impact Report (DEIR). That letter included comments and recommendations for activities and measures identified in the draft HCP and DEIR to identify and mitigate the HCP's significant or potentially significant direct and indirect impacts on biological resources. Attachment 1 included comments pertaining to the removal of seasonal fencing, mechanical trash removal, capture and captive rearing of western snowy plover chicks and eggs, special status plant species, and the use of unmanned aircraft systems (UASs).

As noted in the revised HCP and RDEIR, CDPR is in the preliminary stages of pursuing a Natural Community Conservation Plan (NCCP) with CDFW to comply with CESA and Fish and Game Code and authorize the incidental take of State-listed species as part of

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the continued management of the PSB and ODSVRA. CDFW has also been collaborating on a Biodiversity Management Plan (BMP; CDFW 2021) with CDPR to assist with implementing measures to avoid and minimize impacts to sensitive biological resources while the NCCP is being developed. While several of CDFW's comments and recommendations were addressed within the revised HCP and BMP (CDFW 2021), CDFW has the following comments and recommendations for consideration.

Removal of Seasonal Fencing

As discussed in Attachment 1, the removal of seasonal fencing east around the Boneyard Enclosure and the 6 Enclosure would reduce the amount of available protected habitat for western snowy plover (SNPL) and California least tern (CLTE) nesting. The reduction of available nesting habitat and increased disturbance from revised HCP activities occurring within and adjacent to these areas may also cause SNPL, CLTE and other migratory bird species to discontinue their use of these areas and the HCP area in general. Additionally, the revised HCP avoidance and minimization measures including a slow reduction of the 6 Enclosure, a reinstatement of the 6 Enclosure if the updated SNPL breeding population metric is not met, and creating single nest enclosures for SNPL that nest outside of protected areas will not replace nor offset the removal of permanently protected nesting and foraging habitat nor meet the requirements to avoid impacts to a fully protected species. As such, CDFW continues to recommend that CDPR acquire take authorization through the completion and approval of the NCCP and that CDPR restrict all activities that could potentially result in take of any fully protected species, including removing the fencing around the Boneyard and 6 Enclosure, until a NCCP has been approved by CDFW and take authorization pursuant to Fish and Game Code section 2835 has been obtained from CDFW. CDFW also recommends that CDPR continue collaborating on the BMP (CDFW 2021) and implementing the measures outlined in the BMP (CDFW 2021) to avoid and minimize impacts to sensitive biological resources while the NCCP is being developed.

Night Vehicle Use

The revised HCP allows for unrestricted access for both street legal and off highway vehicle use within the HCP area and acknowledges that night vehicle use can have impacts (e.g., vehicle strikes that cause injury or mortality) on SNPL and CLTE. As the Draft HCP and DEIR presumed that night vehicle use impacts would be uncommon and insignificant, this was based on a past impact study with noted shortcomings. Thus, CDFW has recommended that a peer reviewed, multi-year academic study be conducted and funded by CDPR. CDPR agreed to conduct and fund a new multi-year study (hereafter, Night Riding Study) as part of the BMP (CDFW 2021) and collaboration with CDFW on the Night Riding Study is ongoing. In the event that the Night Riding Study demonstrates that night OHV activities result in any of the following:

- 1) statistically significant reductions to avian spatial and/or temporal use patterns;
- 2) statistically significant reductions to nesting and/or nesting success;
- 3) statistically significant reductions in foraging times or areas; or
- 4) statistically significant reductions

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to overall individual numbers of special status avian species, CDFW recommends that highway vehicle access along the foredunes and surf zone south of Post 4.5 be restricted after sunset until a NCCP has been approved by CDFW and take authorization pursuant to Fish and Game Code section 2835 has been obtained from CDFW.

Capture and Captive Rearing of Western Snowy Plover Chicks and Eggs

The revised HCP proposes to allow the increased capture and captive rearing of up to 12 SNPL chicks and/or 12 SNPL eggs per year if the chicks and/or eggs cannot be reunited with the adult or are at risk of harm from covered activities. As outlined in Attachment 1, the capture and captive rearing of SNPL chicks and eggs is considered take under Fish and Game code and would require appropriate permits from CDFW before commencement of these activities. Additionally, the revised HCP includes directing SNPL chicks from the open riding area back into exclosures. These measures would also be considered “pursuit” and therefore “take” under Fish and Game Code section 86.

Special Status Plant Species

The revised HCP and RDEIR acknowledge that several special status plant species, including the Stated listed plant species mentioned above, would be impacted by operations and maintenance activities including but not limited to mechanical trash removal, fence installation and removal, and newly proposed activities. The revised HCP notes that the take of listed plants are not prohibited under the ESA and provides impact amounts and avoidance and minimization measures, including the incorporation of preconstruction surveys to identify and mitigate impacts to special-status plant species. As noted above and in Attachment 1, any impacts to State listed plant species without appropriate take authorization would be a violation of CESA and CDFW continues to recommend that CDPR either fully avoid take of State-listed plants or acquire appropriate take authorization. As outlined in the BMP (CDFW 2021), with the ongoing management activities by CDPR, CDFW recommends this take authorization occur through the completion and approval of a NCCP and that CDPR restrict all activities that could potentially result in take of any State-listed plant species until a NCCP has been approved by CDFW and take authorization pursuant to Fish and Game Code section 2835 has been obtained. Alternatively, or in the meantime, project specific take authority for CESA listed species could be acquired by CDPR through a State incidental Take Permit pursuant to Fish and Game Code Section 2081(b). CDFW also recommends that CDPR continue collaborating with CDFW on BMP implementation (CDFW 2021), including plant specific avoidance measures outlined to avoid impacts to State-listed plants while the NCCP is being developed.

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Evaluation of Impacts to State Listed Plant Species

The revised HCP and RDEIR currently include an evaluation of impacts to State-listed Plant species as group, rather than having a robust analysis of impacts to each of the covered State listed plant species individually. The RDEIR in particular includes a general analysis of impacts to the covered State listed plant species noted above. As these covered activity impact analyses do not focus on individual species and their habitats, it is difficult to ascertain which covered activities may impact which species. It is also difficult to ascertain whether the RDEIR adequately assessed each species bloom period, habitat requirements, potential for occurrence, and potential for covered activity related impacts as part of the impact analysis. As such, CDFW recommends that state-listed plant species be addressed individually rather than combined under a single generic plant section.

Special Status Plant Surveys

In addition to this general recommendation, and until appropriate State take authorization has been obtained, CDFW recommends that all areas with potentially suitable habitat be surveyed for special-status plants by a qualified botanist following the “Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities” (CDFW 2018) prior to initiating any activities that could result in disturbance to the habitat. This protocol, which is intended to maximize detectability, includes identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. In the absence of protocol-level surveys being performed, additional surveys may be necessary. CDFW also recommends these surveys incorporate an appropriate buffer (e.g., 500 meters) around suitable habitat to look for new individuals that may germinate from the seed bank on the periphery of an occurrence. CDFW also recommends that this survey buffer be incorporated as part of the applicable avoidance and minimization measures identified within the revised HCP to further avoid and minimize impacts to special status plant species, including State-listed species.

CDFW also advises special-status plant species be avoided by implementing a minimum 50-foot no-disturbance buffer around the outer edge of plant population(s) or specific habitat type(s) that support special-status plant species. CDFW recommends the 50-foot no-disturbance buffer include indirect impacts such as excessive dust, sedimentation, excessive runoff, or other disturbances that may not result from direct ground-disturbance but could also impact habitat quality habitat. If buffers cannot be maintained, then consultation with CDFW is warranted to determine appropriate minimization and mitigation measures for impacts to special-status plant species, or in the case of plant species listed pursuant to CESA or the Native Plant Protection Act, to determine if take can be avoided.

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As stated above, if State-listed plant species are identified during botanical surveys, consultation with CDFW is warranted to determine if the activity can avoid take. If take cannot be avoided, take authorization prior to any ground-disturbing activities would be warranted. Take authorization would occur through issuance of an ITP by CDFW, pursuant to Fish and Game Code section 2081(b) or through the approval of a NCCP pursuant to Fish and Game Code section 2800 *et seq.*

Special-Status Plant Avoidance and Minimization Measures

Currently, the revised HCP includes avoidance and minimization measures for special status plant species during implementation of the Habitat Restoration Project (Covered Activity 16) within the HCP area. These measures include survey, avoidance, and salvage/relocation requirements; however, these measures are not specific to the blooming periods, habitat requirements, and relocation/salvage approaches of the covered plant species identified in the revised HCP. In addition to the comments above that CDPR avoid impacts to State-listed plant species until appropriate take authorization is obtained, CDFW recommends that the special-status plant avoidance and minimizations measures outlined for Covered Activity 16 (CA-16) be modified to be specific to each plant species identified in the revised HCP. CDFW is available to assist CDPR with incorporating these species-specific AMMs.

CA-16, CA-21, and CA-50 Plant Impacts

Covered activities CA-16, CA-21, and CA-50 have a strong potential to significantly impact special-status plants and their seed banks. Importantly, these covered activities are unlikely to truly be temporary in nature as soil disruption can have long-term and unpredictable impacts on seed banks and plant populations. Mechanical trash removal for instance, has the potential to crush or destroy special-status species, including state-listed surf thistle and beach spectaclepod. CDFW recommends that the RDEIR acknowledge that seed banks may be vulnerable to proposed activities and soil disturbance within 500 meters of areas currently or historically occupied by CESA-listed plants should be considered for surveys outlined above. CDFW also recommends conducting thorough surveys within enclosures for CA-50 to ensure accurate disclosure of potential impacts, and exploring restriction on covered activity timing to reduce impacts for covered activities.

Fully Protected Species

CDFW has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species is *prohibited*, and CDFW cannot authorize their take in association with CDPR's ongoing management activities except under the provisions of a NCCP, 2081.7 or a Memorandum of Understanding for scientific

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purposes. The HCP area is not currently within an approved NCCP area; 2081.7 does not apply to the development projects outlined in the HCP, and a development project is not considered a scientific purpose. The fully protected CLTE and white-tailed kite (*Elanus leucurus*; WTKI) are known to occur, nest, and forage within the revised HCP area. This status, and the absence of a NCCP, precludes CDFW from authorizing any amount of incidental take for fully protected species.

As noted above, CDPR is in the preliminary stages of pursuing a NCCP with CDFW to comply with CESA and has been collaborating on the CDFW and CDPR-approved BMP (CDFW 2021) to assist with implementing measures to avoid and minimize impacts to sensitive biological resources while the NCCP is being developed. As outlined in the BMP (CDFW 2021), CDPR agreed to implement a 300-meter buffer zone around CLTE nests. The revised HCP includes avoidance and minimization measures which requires implementation of a 100-meter buffer around CLTE nests. The revised HCP further clarifies that the 300-meter buffer has previously been implemented as outlined in the BMP (CDFW 2021); however, CDPR concludes the reduced buffer distance within the revised HCP should be sufficiently effective to minimize disturbance. As previously noted in Attachment 1 and agreed upon by CDFW and CDPR in the BMP (CDFW 2021), CDFW strongly recommends that a 300-meter buffer be implemented around CLTE nests in the main enclosure at ODSVRA while take is prohibited (e.g. with no NCCP in place) and in developing the adaptive management measures needed for a NCCP.

Stream Fisheries

As noted in Attachment 1, the revised HCP area supports two special status freshwater fish species, the State species of special concern and federally threatened steelhead (*Oncorhynchus mykiss irideus*), South-Central California Coast Distinct Population Segment, and tidewater goby. Both species inhabit Arroyo Grande Creek and/or the Arroyo Grande Creek lagoon during their freshwater life stages, and Arroyo Grande Creek has been identified by the National Oceanic and Atmospheric Administration (NOAA) and the National Marine Fisheries Service (NMFS) as critical habitat for the recovery of South-Central steelhead. While both steelhead and tidewater goby primarily inhabit portions of Arroyo Grande Creek within and upstream of the lagoon, a contiguous undisturbed stream from the ocean to the lagoon is important for steelhead (adults and juveniles) and tidewater goby immigration and emigration. However, vehicle access to the camping and off highway vehicle riding areas in the revised HCP can currently only occur from either the Grand Avenue or Pier Avenue Ramps. These two ramps are located north of Arroyo Grande Creek, and the ODSVRA is south of Arroyo Grande Creek. These two access points require that vehicles cross Arroyo Grande Creek when it is flowing, which generally occurs during the winter and spring seasons. When the lagoon mouth is typically closed (summer/fall), vehicles traverse the same path but do not contact the stream/lagoon environment since the stream is no longer flowing across the beach, although it should be noted that the lagoon and closed estuary are well known to be important rearing habitat for steelhead and tidewater goby.

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and there could still be a risk to these species from recreation. It is noteworthy that in wet years, the creek can run across the sand year-round. The area of stream vehicle crossing, while the stream is flowing, is characterized as sandy beach, adjacent to the Pacific Ocean, varying in width from approximately 50 feet to several hundred feet wide, depending on tidal conditions. In this location, also referred to as the creek mouth, stream conditions also vary depending on stream flow, which can vary from several thousand cubic feet per second during high flow periods in the winter and spring, to no outflow to the ocean during the summer and fall.

NOAA Fisheries 2008 Letter

The revised HCP and RDEIR note that steelhead is not a covered species within the revised HCP as NOAA Fisheries previously concluded that the existing covered activities are not likely to result in the take of steelhead with the implementation of the avoidance and minimization measures outlined by CDPR (NOAA Fisheries 2008). The RDEIR also notes that, as covered activities are not expected to impact steelhead, the species is not considered further in the analysis.

The NOAA Fisheries (2008) letter states that, "Motorized vehicles are expected to encroach into steelhead-bearing creeks. Of the coastal units considered here, only Arroyo Grande Creek experiences vehicular crossings. Vehicles cross the creek during periods of low flow when steelhead are not expected to be emigrating or immigrating. Although possible, we do not believe it probable that steelhead would come into direct contact with vehicles crossing the creek." The NOAA Fisheries (2008) letter also states: "Please be advised that the above conclusions do not provide an exemption from take liability under Section 9 of the U. S. Endangered Species Act." While NOAA Fisheries concluded that the existing covered activities are not anticipated to result in take, the letter acknowledges the potential for steelhead to come into contact with a vehicle. Additionally, the letter does not discuss the potential for indirect impacts to steelhead and assumes that steelhead do not migrate during low flows. CDFW does not concur with NOAA fisheries overall conclusions as CDFW staff have documented juvenile steelhead migration occurring as early as October through as late as June on the descending limb of the hydrograph and under winter base flow conditions within San Luis Obispo Creek. Essentially, CDFW has confirmed, through the use of Passive Integrated Transponder (PIT) tag detection data, that steelhead migration is documented to occur at relatively low flows. This conclusion is further supported in literature, with CDFW's Standard Operating Procedure for Critical Riffle Analysis for Fish Passage in California (2017) document noting that adult steelhead can migrate at depths of 0.7-feet and smolts at 0.4-feet. Based on this information, it is likely that vehicular crossings of Arroyo Grande Creek do occur when steelhead are expected to be migrating and that vehicular crossings could impact steelhead migration.

As discussed above, CDFW does not concur that steelhead take is unlikely with the current revised HCP avoidance and minimization measures. In addition to CDFW's

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knowledge of steelhead migration in this area, CDPR's current steelhead survey approach, which incorporates seining surveys in shallow, wadable waters, and which does not allow for an estimation of population size, is likely insufficient to accurately detect steelhead presence and population trend information. Further, direct steelhead take via vehicle crossings would be extremely difficult to detect and would likely be undetectable through CDPR's current monitoring efforts.

There are, at times, thousands of vehicular crossings daily at Arroyo Grande Creek during the migratory season (generally December - June), and these crossings are likely to interrupt both migration and potential take steelhead individuals. There is evidence of steelhead take, as documented by CDPR staff, in recent years at the Arroyo Grande Creek mouth (March, 2012; January 28, 2021; March 26, 2024; March 5, 2025), although the cause of death was determined to be unknown given the circumstances around detection. Finally, in addition to direct vehicle strikes on steelhead and tidewater goby, indirect effects from vehicle noise, physical disturbance within the stream, potential water pollution and light pollution (at night) from vehicles, are all likely to impact steelhead movement and migration. To partially address these concerns, the BMP (CDFW 2021) includes measures to further avoid and minimize impacts to both steelhead tidewater goby.

Biodiversity Management Plan for Steelhead and Tidewater Goby

As outlined in the BMP (CDFW 2021), and partially specified in several avoidance and minimization measures for tidewater goby in the revised HCP, CDPR committed to implementing the following measures to avoid and minimize impacts to steelhead and tidewater goby:

1. Closure of the Arroyo Grande Creek crossing to vehicles based on a hydrologic trigger (with a public health and safety exception). Currently the closure would trigger at a depth of 12 inches, pending further protective measures like installation of a crossing structure and further fisheries study.
2. Commitment to evaluating a potential mobile stream crossing structure for Arroyo Grande Creek as soon as possible to reduce vehicle impacts contingent on completion of a feasibility study analyzing costs, design, and operational considerations. However, CDFW is aware that a feasibility study has since been conducted and it determined a crossing structure infeasible due to the necessary bridge length and number of spans. As such, a crossing structure was removed from consideration.
3. Increased use of technology for outreach on stream crossing through design and utilization of the CPS reservation e-system. This increased outreach can facilitate greater advance notice to campers and recreationalists when a depth-criteria will trigger a prohibition on vehicles crossing the stream.

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4. Develop and implement a study to gather site specific information and foster adaptive management concerning these measures and long-term impacts of vehicle crossings on the stream and species.

The BMP (CDFW 2021) also notes that these measures should be re-evaluated in conjunction with the possible construction of a third access point at the southern end of the HCP area.

While CDFW acknowledges that CDPR has committed to incorporating the measures within the BMP (CDFW 2021), and is implementing portions of the BMP (CDFW 2021) pertaining to steelhead and tidewater goby, CDFW recommends the following measures to re-evaluate and modify what was originally recommended given the infeasibility of a crossing structure and subsequent information gathered by CDFW:

Implementation of CDFW Tool to Avoid Steelhead and Tidewater Goby Take

CDFW recommends that CDPR update the Arroyo Grande Creek crossing closure criteria from the current water depth threshold of 12 inches. CDFW recently updated the creek crossing closure analyses and recommends that CDPR use the tool outlined in the 2025 CDFW memorandum (Attachment 2) shared with CDPR to determine when to close vehicle crossing at Arroyo Grande Creek. This tool was developed using topographic, stream stage/discharge, and tidal stage data to inform when conditions are particularly conducive to steelhead migration and includes depth criteria for steelhead which is consistent with CDFW's Standard Operating Procedure for Critical Riffle Analysis for Fish Passage in California (CDFW 2017). This tool would allow for greater accuracy and consistency and would reduce vehicle impacts to steelhead and tidewater goby and is consistent with the recommendations outlined above. Additionally, this tool has the added benefit of informing when hydrological conditions at the vehicular crossing may present a public safety concern and does not require State Parks staff to conduct physical depth measurements at the vehicle crossing. CDFW also recommends that CDPR coordinate with CDFW Central Region Fisheries staff for implementation of this tool and that this same approach be utilized to determine when to implement vehicle crossing closures for Pismo and Oso Flaco Creeks.

Notification of Steelhead and Tidewater Goby Take

CDFW recommends that the revised HCP and RDEIR include measures that necessitate routine water quality monitoring of the Arroyo Grande Creek crossing and lagoon immediately during and/or after steelhead and tidewater goby fish kills. Collection of water quality (and fish) data is essential for helping to determine the potential cause of fish kills.

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Arroyo Grande Creek Camera Monitoring

The revised HCP and RDEIR notes that Arroyo Grande Creek can only be crossed using street-legal vehicles and such vehicles are prohibited from crossing Arroyo Grande Creek in any manner other than by crossing the creek as close to the ocean waterline as possible and parallel to the ocean waterline. Driving upstream or downstream in the creek channel or in any other manner in the creek channel is prohibited, and a closure would be implemented if water depth exceeds 12 inches as measured closest to the water line. Additionally, CDPR is currently working to gain a better understanding of Arroyo Grande Creek vehicle use and associated impacts to fish migration and outmigration as part of the ongoing studies identified in the BMP (CDFW 2021). These studies are being conducted in collaboration with CDFW. CDFW has provided CDPR with updated Arroyo Grande Creek closure recommendations; continuing to rely upon the interim 12-inch depth criteria identified in the BMP (CDFW 2021) is likely insufficient to prevent impacts to steelhead from vehicular crossings, particularly given that installation/construction of a stream crossing structure has been deemed infeasible by CDPR. Further, current reporting/data collection efforts of the crossing depth and related potential steelhead and tidewater goby take are insufficient to inform management actions. As such, CDFW recommends that CDPR install a camera at the mouth of Arroyo Grande Creek to quantify the number of vehicular crossing each day during the steelhead migratory season (generally, December through June). CDFW is available to assist with camera placement efforts.

Fisheries Monitoring

The revised HCP and RDEIR note that fisheries surveys have been ongoing within Arroyo Grande Creek and estuary since 2003 and the primary purpose is to document native fish populations in the HCP area. In addition, these surveys are intended to gather information about various species' use of the habitats within the HCP area, evaluate whether covered activities may be impacting fisheries and aquatic habitat, and document the impacts of habitat disturbance caused by upstream water management activities. The revised HCP notes that seining would include approximately 10 to 15 seine hauls among the various waters surveyed and the seine would typically be swept in an arc, with a set pivot point on shore, or dragged across or longitudinally along pool areas that are accessible and unimpeded by vegetation or debris. CDFW is concerned that the current fisheries monitoring excludes areas of lagoons that are unwadable; which limits the surveyed area to areas less than approximately 5 feet deep and thus may be missing habitat that is most likely to contain steelhead. It should be noted that previous surveys are likely not sufficient to support a determination of absence of steelhead in Arroyo Grande and Pismo Creek lagoons. Additionally, CDPR's fish monitoring surveys provide qualitative data on species presence, but do not provide quantitative data on fish populations, making it difficult to infer any population changes over time.

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As such, CDFW recommends that surveys implement seining techniques that are designed to capture the breadth of fish species present (including steelhead) and are able to detect changes in population size. CDFW recommends surveys utilize a taller/longer seine than is currently used and hauling the deep end of the seine with a jon boat or canoe to adequately sample deep areas of the lagoon that are unwadable, as this habitat may be more likely to hold steelhead. Regarding study design, CDFW recommends using a mark-recapture design such as that described in Frechette et al. (2016). Additionally, with properly experienced and trained biologists that have appropriate State and federal permits, CDPR could implant steelhead with Passive Integrated Transponder (PIT) tags during these surveys, and PIT antennae could be operated to assess steelhead movement in and out of the Arroyo Grande Creek lagoon. A DIDSON Sonar camera or weir/trap installed upstream of the lagoon could provide insights into adult steelhead population status, trend, and migration timing. Lagoon surveys should also include a water quality monitoring component -- routine water quality profiles of salinity, temperature, and dissolved oxygen (taken every 0.25 meter across the water column), along with a Secchi depth reading (to assess water clarity) to monitor/assess the lagoons' suitability for steelhead (and other aquatic species). CDFW also recommends that seine surveys for steelhead be conducted separately from tidewater goby surveys, as differences in these species biology and ecology may dictate the use of different seine sizes, sampling locations, and study designs.

Steelhead and Tidewater Goby Lagoon Restoration

CDFW is aware of ongoing discussions between CDFW and San Luis Obispo County regarding restoration within the Arroyo Grande Creek lagoon. For future steelhead and tidewater goby restoration work, CDFW recommends against utilizing a simplistic restoration approach that is solely focused on increasing hydrological connectivity and circulation between water bodies of the lagoon complex within the HPC area. This type of simplistic restoration approach resulted in decades of annual fish kills (and severe reduction of California red-legged frog) at Pescadero State Beach in San Mateo County due to toxic salinity levels within the lagoons (Smith and Reis 1997, Sloan 2006, Smith 2009). Instead, CDFW recommends that restoration goals maximize habitat for steelhead and tidewater goby and focus on restoration methods that provide sufficient depth; transition habitat that facilitates salinity stratification during the migration period; healthy water quality that contains salinity destratification during the summer and fall, sufficient dissolved oxygen, and appropriate temperatures in 0.25-meter increments in the water column and secchi depth; and hydrologic connection between Arroyo Grande Creek during the annual steelhead migration period (December 1 through June 15). CDFW also recommends that CDPR and San Luis Obispo County staff coordinate with CDFW fisheries staff during the development and implementation of lagoon restoration work within the HCP area.

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Crotch's Bumble Bee

As of September 30, 2022, CBB is a candidate species under CESA and as such, receives the same legal protection afforded to an endangered or threatened species (Fish & G. Code, §§ 2074.2 & 2085). It is illegal to import, export, take (hunt, pursue, catch, capture, or kill, or attempt engage in any of these activities), possess, purchase, or sell CBB or any part or product thereof (Fish & G. Code, §§§ 86, 2080, 2085).

The HCP area is within the geographic range of Crotch's bumble bee (CBB) and portions of the site contains habitat that may support CBB. CBB are known to inhabit areas of grasslands, scrub, and riparian, that contain requisite habitat elements for nesting, such as small mammal burrows and bunch/thatched grasses, and these habitat elements may be present within the HCP Area.

Currently, the revised HCP and RDEIR do not contain evaluation of CBB, and avoidance and no mitigation measures are proposed. As such, CDFW recommends that CDPR incorporate the following measures prior to initiating any development activities in any areas where CBB may occur:

CBB Habitat Assessments

CDFW recommends a qualified biologist conduct a habitat assessment to determine if the development area and the immediate surrounding vicinity contain habitat suitable to support CBB. Potential nesting sites, which include all small mammal burrows, perennial bunch grasses, thatched annual grasses, brush piles, old bird nests, dead trees, and hollow logs would need to be documented as part of the assessment.

CBB Surveys

If potentially suitable habitat is identified, CDFW recommends that a qualified biologist conduct focused surveys for CBB, and their requisite habitat features following the methodology outlined in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (CDFW 2023).

CBB Avoidance and Consultation

If CBB is detected, then CDFW recommends that all small mammal burrows and thatched/bunch grasses be avoided by a minimum of 50 feet to avoid take and potentially significant impacts. If ground-disturbing activities will occur during the overwintering period (October through February), consultation with CDFW is warranted to discuss how to implement covered activities and avoid take. Any detection of CBB prior to or during covered activities warrants consultation with CDFW to discuss how to avoid take. If project specific take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA, until an NCCP has

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been approved by CDFW and take authorization pursuant to Fish and Game Code section 2835 has been obtained from CDFW.

The Use of UAS: The RDEIR and revised HCP proposes to allow drones and other unmanned aircraft in the HCP area to reduce the time and cost of data collection and notes that, "Currently, CDPR does not have authorization to fly UAS during the nesting season and over known nesting areas. CDPR proposes approving the potential use of UAS during both the nesting and non-nesting periods and over occupied areas (nesting and roosting areas) for data collection purposes as needed to meet the monitoring or management objectives. All UAS activity would be implemented in a way that minimizes impacts to nesting or roosting SNPL and CLTE. The 2021 Biodiversity Management Plan places limits on use of UAS during the nesting season; however, the Biodiversity Management Plan is an interim step until the completion of a NCCP." As highlighted in the RDEIR and agreed to by CDPR in the BMP (CDFW 2021), CDFW recommends that CDPR restrict UAS flights during the nesting season in known nesting areas until the NCCP has been approved by CDFW and take authorization pursuant to Fish and Game Code section 2835 has been obtained from CDFW.

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 surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be filled out and submitted online at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The types of information reported to the CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

FILING FEES

Covered activities outlined in the HCP, as proposed, would have an impact on fish and/or wildlife, and an 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 approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CONCLUSION

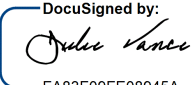
CDFW appreciates the opportunity to comment on the RDEIR and revised HCP to assist CDPR in identifying and mitigating the HCP's impacts on biological resources. CDFW recommends that CDPR continue to coordinate with CDFW to obtain a NCCP and that CDPR restrict all activities that could potentially result in take of any fully protected species until a NCCP has been approved by CDFW and take authorization

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pursuant to Fish and Game Code section 2835 has been obtained from CDFW. In the approval of a NCCP and the authorization of the taking of species listed in the NCCP, including but not limited to CLTE and SNPL, the requirements for the approval of the NCCP must be met in accordance with Fish and Game Code sections 2820 and 2821. This includes the integration of specific conservation measures to meet the biological needs of species, protection of habitat through the creation and permanent protection of habitat reserves, and funding for perpetual adaptive management. It is important to note that additional minimization and mitigation measures for several species beyond those included in the RDEIR and revised HCP would likely be required for approval of an NCCP that includes those species. Further, CDFW recommends that CDPR initiate standing NCCP meetings with CDFW to substantially aid progress in working towards acquisition of an NCCP.

A Mitigation and Monitoring Program (MMRP) (Attachment 3) is included to assist CDPR with incorporating the recommended mitigation measures provided above. If you have any questions regarding this letter or further coordination, please contact Evelyn Barajas-Perez, Environmental Scientist, at the address provided on this letterhead, by telephone at (805) 503-5738 or evelyn.barajas-perez@wildlife.ca.gov.

Sincerely,

DocuSigned by:

FA83F09FE08945A...
Julie A. Vance
Regional Manager

Attachments

Attachment 1 - CDFW June 2020 Letter
Attachment 2 - 2025 CDFW Memorandum
Attachment 3 - MMRP

ec: State Clearinghouse
Land Use and Climate Innovation
State.Clearinghouse@lci.ca.gov

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Catherine Darst
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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



June 1, 2020

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**Subject: California Department of Parks and Recreation Oceano Dunes District
Habitat Conservation Plan (HCP) and Draft Environmental Impact Report
(DEIR) (Project), SCH No. 2018011012**

Dear Mr. Glick:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a DEIR from the California Department of Parks and Recreation (CDPR) Off-Highway Motor Vehicle Recreation (OHMVR) Division of the Oceano Dunes District (hereafter, CDPR) for the Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW 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

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.

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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 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. 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 law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related take authorization as provided by the Fish and Game Code will be required.

In this role, CDFW is responsible for providing, as available, biological expertise during public agency environmental review efforts (i.e., CEQA), focusing specifically on project activities that have the potential to adversely affect fish and wildlife resources. CDFW provides recommendations to identify potential impacts and possible measures to avoid or reduce those impacts.

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, eggs and nests include, sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird). CDFW encourages Project implementation occur during the bird non-nesting season. However, if ground-disturbing activities must occur during the breeding season (February through mid-September), the Project applicant(s) is/are responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes.

Fully Protected Species: CDFW has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species is prohibited, and CDFW cannot authorize their take in association with a general project except under the provisions of a Natural Communities Conservation Plan (NCCP), 2081.7 or a Memorandum of Understanding for scientific purposes.

Rare Species: Species of plants and animals need not be listed as Endangered, Rare or Threatened (E, R or T) pursuant to CESA and/or the Federal Endangered Species

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Act (ESA) to be considered E, R or T under CEQA. If a species can be shown to meet the criteria for a listing as E, R or T under CESA and/or ESA as specified in the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Chapter 3, Section 15380), it should be fully considered in the environmental analysis for the Project.

Lake and Streambed Alteration: CDFW has regulatory authority with regard to activities occurring in streams and/or lakes that could adversely affect any fish or wildlife resource, pursuant to Fish and Game Code sections 1600 *et seq.* Section 1602(a) of the Fish and Game Code requires an entity to notify CDFW before engaging in activities that would substantially change the bed, channel, or bank of a stream or substantially divert or obstruct the natural flow of a stream.

Water Pollution: Pursuant to Fish and Game Code Section 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into “Waters of the State” any substance or material deleterious to fish, plant life, or bird life, including non-native species. The Regional Water Quality Control Board and United States Army Corps of Engineers also has jurisdiction regarding discharge and pollution to Waters of the State.

PROJECT DESCRIPTION SUMMARY

Proponent: CDPR

Project Description: The Project consists of the ongoing operation and management of the Pismo State Beach and the Oceano Dunes State Vehicular Recreation Area (ODSVRA). CDPR has prepared a draft Habitat Conservation to support the issuance of a Federal incidental take permit (ITP) by the United States Fish and Wildlife Service (USFWS) under Sections 10(a)(1)(A) and 10(a)(1)(B) of the Federal Endangered Species Act (FESA) of 1973. The issuance of the ITP would authorize take of the Federally listed species identified in the DEIR and HCP during the management and operation of two state parks. The DEIR would also support an analysis of impacts in the event that CDPR were to prepare a Natural Community Conservation Plan (NCCP) in support of an application to CDFW for issuance of a permit authorizing incidental take of State-listed animal and plant species pursuant to California Fish and Game Code sections 2800 *et seq.*, including section 2835. The analysis of impacts in the draft HCP is based on the current program being implemented by CDPR at Pismo State Beach and ODSVRA. The HCP includes 52 operations and maintenance activities divided into five categories: park visitor activities, natural resources management, park maintenance, visitor services, and other activities. The majority of the activities described in the HCP have been occurring at the parks for decades and are considered part of the baseline environmental conditions of the HCP area. The HCP also includes four new activities that are evaluated in the DEIR:

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1. The capture and captive rearing of western snowy plover (*Charadrius nivosus nivosus*; SNPL) chicks and eggs if they cannot be reunited with an attending adult or are at risk of death or injury from HCP activities not related to HCP species management activities (e.g., motorized recreation, pedestrian recreation, new covered activities).
2. Mechanical trash removal through beach raking or grooming from Grande Avenue south to orientation marker (Post) 6.
3. The removal of seasonal fencing erected along the Boneyard Exclosure (approximately 49 acres) and the incremental removal of seasonal fencing along the 6 Exclosure (60 acres) to allow year-round recreation in these two exclosures.
4. The use of unmanned aircraft systems (UAS) (e.g., drones) in the HCP area to reduce the cost associated with data collection.

The HCP also covers new activities currently being planned or which may be considered in the future that will be evaluated in a separate environmental review for CEQA compliance according to DEIR Section 2.4.2.3.

Location: The HCP area includes 5,005 acres of Pismo State Beach and ODSVRA. The HCP area is bound by the City of Pismo Beach to the north, the Guadalupe-Nipomo Dunes National Wildlife Refuge to the south, urban and agricultural land to the east and the Pacific Ocean to the west. Primary access to the HCP area is via United States Highway 101 and State Route 1.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist CDPR in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

Removal of Seasonal Fencing: The proposed removal of the seasonal fencing along the east Boneyard Exclosure and the 6 Exclosure would reduce the amount of protected nesting habitat available for SNPL and California least tern (*Sternula antillarum browni*; CLTE) in the HCP area by 1/3, a large portion of which is high quality nesting habitat for these species. This large-scale habitat removal will result in a reduction of available protected nesting habitat which may in turn lead to these species nesting outside of the protected habitat and exposing them to additional potential impacts from human and recreation activities occurring within the HCP area. Additional impacts may also occur from nest overcrowding in the remaining protected areas, outcompetition of available

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nesting space within the remaining exclosures, failure to breed and/or reduced fitness. In addition, by allowing HCP activities to encroach within closer proximity to the remaining areas of protected habitat, the quality of the remaining protected habitat may be reduced. The reduction of available nesting habitat and increased disturbance from HCP activities occurring within and adjacent to these areas may also cause SNPL, CLTE and other migratory bird species to discontinue their use of these areas and the HCP area in general. This would impact not only the populations of these species but also the area's use as a Pacific Flyway Migratory Route and overwintering area for a variety of bird species, thus causing long-term and permanent impacts to several bird species nursery sites, including SNPL and CLTE (a State fully protected species), which would trigger a mandatory finding of significance under the CEQA Appendix G Guidelines. The suggestion that these activities, with the proposed avoidance and minimization measures, will have a less than significant impact on SNPL and CLTE is a gross underestimation by the DEIR and HCP of the severity that the proposed activities will have on these populations and their long-term reproductive success. The 6 Exclosure alone is the location where up to 80% of the CLTE population nests on an annual basis. The proposed DEIR and HCP avoidance and minimization measures including a slow reduction of the 6 Exclosure, a reinstatement of the 6 Exclosure if success criteria are not met, and creating single nest exclosures for SNPL that nest outside of protected areas will not replace nor offset the removal of protected nesting and foraging habitat nor meet the requirements to avoid impacts to a fully protected species (see discussion below). As a result, this should be considered a significant and unavoidable impact under CEQA.

Mechanical Trash Removal: The DEIR and HCP propose to initiate mechanical trash removal via raking or grooming in a portion of the HCP area from Grande Avenue south to Post 6 with the possibility of future expansions into additional areas of the HCP. Beach grooming and raking has been shown to reduce the amount of available foraging habitat for avian and other wildlife species by creating a reduction and change in the composition and availability of invertebrates by altering the beach ecosystem in these areas. Invertebrate species provide an invaluable food resource to numerous populations of migrating, overwintering, nesting and foraging bird species that inhabit the HCP area and this activity may reduce or eliminate the HCP area's ability to continue to serve as a suitable stopover for migrating and overwintering birds, impacting the area's ability to continue to support the diversity and density of bird species that travel through the area and use it as an important migratory corridor.

In addition, the continued use of mechanical trash removal in these areas could also result in permanent changes to the dune composition, further reduce the availability of potential nesting habitat for SNPL, and could increase disturbance to adjacent SNPL nesting and foraging habitat even with the proposed 500-foot buffer from known nest sites. The continued disturbance from mechanical trash removal could also lead to the

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preclusion of SNPL and other bird species from nesting and/or foraging in this area in the future.

While the DEIR and HCP does state that a study will be conducted to determine the effect of mechanical trash removal on the invertebrate population, and measures will be implemented if there is a significant decline in invertebrates, this does not guarantee the protection of this invaluable food resource, nor does it guarantee the Project's ability to reestablish not only the abundance, but the diversity of the invertebrate population. The DEIR and HCP also do not describe nor reference whether an exhaustive literature review was conducted and whether results and conclusions could be extrapolated from previous work to further refine the proposed future study testing and methodologies. CDFW recommends the DEIR and HCP be revised to include a discussion of previous studies and literature regarding mechanical beach disturbance and impacts on invertebrate populations. Absent data to demonstrate the robust veracity of the conclusions drawn in the DEIR and HCP, the suggestion that impacts from mechanical trash removal would be short-term and temporary because the activity will only occur for a short duration appears to be a mischaracterization by the DEIR and HCP; the proposed activity may have a lasting impact on these populations and their long-term reproductive success. Therefore, CDFW advises that the impact of mechanical trash removal should be considered a significant and unavoidable impact under CEQA.

Capture and Captive Rearing of SNPL Chicks and Eggs: The DEIR and HCP proposes to allow the increased capture and captive rearing of up to 12 SNPL chicks and/or 12 SNPL eggs per year if the chicks and/or eggs cannot be reunited with the adult or are at risk of harm from HCP activities. The DEIR analysis assigns 1/3 of the proposed increase (i.e., 4 SNPL chicks and/or 4 eggs) to the 6 Exclosure reduction, 1/3 to future dust control measures (which will be analyzed in a separate CEQA document), and 1/3 to the increase in chick and egg capture for captive rearing if they are observed to be threatened by recreational activity or other noncovered species management activities that were not previously conducted because currently CDPR attempts to protect nests and move chicks back to the safety of the seasonal exclosure.

The DEIR states that the capture and captive rearing of SNPL chicks and eggs is beneficial because even if some of the chicks or eggs do not survive, it serves to reduce direct mortality or injury that otherwise may occur from HCP activities. While CDFW acknowledges that captive rearing may reduce direct mortality from HCP activities, CDFW would like to point out that the increase in the proposed level of capture and captive rearing would not be necessary if the risk of injury and/or mortality was not increased by the removal of the seasonal exclusion fencing, the encroachment of HCP activities within the former exclusion areas, the reduction in the effort of CDPR attempts to protect nests and move chicks back into the safety of the seasonal exclosures, and the reduced area of available seasonal exclosures for SNPL chicks and eggs to be

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moved back into by CDPR. In addition, CDFW does not agree with the conclusion that the impacts are less than significant because the loss of SNPL chicks and eggs needs to be considered within the context of the conservation program implemented by CDPR in the HCP area, which has increased the breeding population of SNPL, and the increased loss of chicks and eggs is not expected to diminish the enlarged SNPL population sustained by the CDPR conservation program. The enlarged SNPL population sustained by the conservation program is part of the existing baseline for the Project and should not be considered to provide additional offsets to new and increased losses of SNPL chicks and eggs due to the aforementioned activities. Therefore, CDFW does not agree that the capture and captive rearing of SNPL chicks and eggs is a less than significant impact. In addition, the capture and captive rearing of SNPL chicks and eggs is considered take under Fish and Game code (as discussed above) and would require appropriate permits from CDFW before commencement of these activities.

Special Status Plant Species: The DEIR and HCP acknowledge the potential for several special status plant species to be impacted by operations and maintenance activities including but not limited to mechanical trash removal, fence installation and removal, and newly proposed activities. In particular, the DEIR and HCP describe impacts to plant species that are both State and federally listed as threatened and endangered including but not limited to the State and federally endangered marsh sandwort (*Arenaria paludicola*) and Nipomo Mesa lupine (*Lupinus nipomensis*); the State threatened and federally endangered Gambel's watercress (*Nasturtium gambelii*); and the State threatened surf thistle (*Cirsium rhotophilum*) and beach spectaclepod (*Dithyrea maritima*). The DEIR and HCP assert that while impacts to these and other plant species could occur, the impacts are less than significant due to limited areas of potentially suitable habitat.

CDFW recommends that all areas with potentially suitable habitat be surveyed for special-status plants by a qualified botanist following the "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (CDFW 2018) prior to initiating any activities that could result in disturbance to the habitat. This protocol, which is intended to maximize detectability, includes identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. In the absence of protocol-level surveys being performed, additional surveys may be necessary.

CDFW also advises the DEIR be revised to avoid special-status plant species by a 50-foot no-disturbance buffer around the outer edge of plant population(s) or specific habitat type(s) that support special-status plant species observed in the Project site. CDFW recommends the 50-foot no-disturbance buffer include indirect impacts such as excessive dust, excessive runoff, or other disturbances that may not result from direct

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ground-disturbance but could also impact habitat quality habitat. If buffers cannot be maintained, then consultation with CDFW is warranted to determine appropriate minimization and mitigation measures for impacts to special-status plant species, or in the case of plant species listed pursuant to CESA or the Native Plant Protection Act, to determine if take can be avoided.

As stated above, if a plant species listed pursuant to CESA or the Native Plant Protection Act is identified during botanical surveys, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, take authorization prior to any ground-disturbing activities may be warranted. Take authorization would occur through issuance of an ITP by CDFW, pursuant to Fish and Game Code section 2081(b) or through the approval of an NCCP pursuant to Fish and Game Code section 2800 *et seq.*

The Use of UAS: The DEIR and HCP proposes to allow drones and other unmanned aircraft in the HCP area to reduce the time and cost of data collection. Although the DEIR stated that in testing, State Parks personnel have determined that an avoidance buffer of 100 feet above ground and 328 feet away from a nest site is sufficient to avoid flushing and abandonment of SNPL nest sites, CDFW does not know the parameters that were used to make this determination and is unaware of any scientific studies that have demonstrated that these buffers are sufficient to avoid flushing and abandonment of nest sites. These buffers may also be inadequate to avoid take of SNPL, CLTE or other special-status wildlife species as defined in Fish and Game Code and discussed above; therefore, CDFW recommends the DEIR and HCP prohibit the use of all UAS within the HCP area to ensure take avoidance.

Fully Protected Species: CDFW has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species is prohibited, and CDFW cannot authorize their take in association with a general project except under the provisions of an NCCP, 2081.7 or a Memorandum of Understanding for scientific purposes. The HCP area is not currently within an approved NCCP area; 2081.7 does not apply to the proposed Project, and a development project is not considered a scientific purpose. The fully protected CLTE, white-tailed kite (*Elanus leucurus*; WTK), brown pelican (*Pelcanus occidentalis*), and American peregrine falcon (*Falco peregrines* ssp. *anatum*; APF) are known to occur within the HCP area. This status, and the absence of an NCCP for the Project, precludes CDFW from authorizing any amount of incidental take for fully protected species. When projects show the potential to cause take of fully protected species, we advise on appropriate measures to avoid take. Given the legal status of fully protected animals, take avoidance measures must meet very high standards of effectiveness. CDFW recommends the DEIR be revised to ensure full avoidance of the above-listed species. If full avoidance cannot be achieved, CDFW

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recommends the Project apply for a NCCP and that CDPR cease all ongoing operations and maintenance activities and refrain from implementation of new activities that could potentially result in take of any fully protected species until the NCCP has been approved by CDFW and take authorization pursuant to Fish and Game Code section 2835 has been obtained from CDFW.

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 the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>

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 DEIR and HCP to assist the CDPR in identifying and mitigating Project impacts on biological resources. Due to the issues presented in this letter, CDFW concludes that the DEIR and HCP do not adequately identify or mitigate the Project's significant, or potentially significant, impacts on biological resources. Deficiencies in the Lead Agency CEQA document can affect later project approvals by CDFW in its role as a Responsible Agency. In addition, because of these issues, CDFW has concerns that the CDPR may not have the basis to approve the project or make "findings" as required by CEQA unless the environmental document is modified to eliminate and/or mitigate significant impacts, as reasonably feasible (CEQA Guidelines, §§ 15074, 15091 & 15092).

Ronnie Glick
CDPR, OHMVR
Oceano Dunes District
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Questions regarding this letter or further coordination should be directed to Lori Bono, Senior Environmental Scientist (Specialist), at the address provided on this letterhead, by telephone at (559) 243-4014, extension 350, or by electronic email at Lori.Bono@wildlife.ca.gov.

Sincerely,

Julie A. Vance
Regional Manager

ec: Office of Planning and Research, State Clearinghouse, Sacramento

Annee Ferranti, CDFW, Annee.Ferranti@wildlife.ca.gov
Bob Stafford, CDFW, Bob.Stafford@wildlife.ca.gov
Lori Bono, CDFW, Lori.Bono@wildlife.ca.gov

Oceano Dunes Fish Passage Tool

Mark Gard, CDFW, 9/12/25

RECOMMENDATIONS

A. Setting Traffic Closures to avoid impacts to steelhead

1. Set traffic closures when A) the San Luis Obispo County gage is reading 8.53 ft and B) during steelhead migration Dec 01 through June 15. This is the reading when the adult steelhead was observed migrating from the ocean (and discovered to be freshly dead) on March 05, 2025 at 6:30am. This would likely be the most protective standard that could be used to trigger beach closures. **This value would trigger traffic closure 43.5% of the time during the steelhead migration period.**

2. Set traffic closures if all three are true: A) tide is greater than 4.67 ft (4.67 ft is the lowest high tide); B) during steelhead migration season (December 01 to June 15); and C) stage at the old USGS gage (which is also on the SLO County website) is greater than 97.2 ft (which corresponds to 4 cfs) to obtain a 0.16 ft depth for passage at the sandbar. **This value would trigger traffic closure 11% of the time during the steelhead migration period.**

B. Deploy a trail camera to quantify impacts.

Example: trail cam that has an infrared sensor – wouldn't need external power. Could mount it at the top of the post that was out there just upstream of where the vehicles were crossing. Have it angled down and looking towards the ocean. Pretty cheap – you can get a two-pack for \$123: [2-Pack Stealthy Trail Game Cameras for Wildlife Deer Observation & Hom – BlazeVideo USA](#)

C. Fish population status and trend monitoring (e.g., seining, trapping, DIDSON, water quality profiles in the lagoon) could be an indicator of overall health and is also less effective as a tool to set traffic closures.

D. Concerns regarding the use of a weir or trap (relative to Recommendation C above) to capture adult steelhead entering Arroyo Grande Creek include:

- **Trapping is not an effective method for triggering traffic closure.** We support the concept of trapping to get an understanding of smolt and adult steelhead abundance and timing of migration individual steelhead.
 - As it relates to traffic closures, there is already enough information in the literature to describe the time period (generally December 01-June 15) when there are sufficient flow conditions (depth and velocity) conditions.

- The steelhead abundance is low in Arroyo Grande Creek, therefore we expect a “patchy return” making it difficult to say when the run has “officially” started and stopped.
 - By the time steelhead were to make it in the trap, they would have already crossed the beach and be at risk of getting run over.
 - The trap targets upstream migrating adult steelhead and doesn’t account for outmigrating kelts and smolts thus not triggering traffic closures and imperiling fish during their outmigration.
 - Basing traffic closures on hydrology during the migration period is more protective of steelhead and also less expense and less effort than running a trap.
- **The trap blocks downstream migration:** We have concerns that the existing trap designs may block steelhead downstream passage of of post-spawn steelhead returning to the ocean (kelts) and smolts and must minimize the potential for entrainment of adult and juvenile steelhead and Tidewater Goby in mesh, panels, posts, etc.
- **The trap is more expensive and more staff-intensive:** The trap must be checked regularly at frequent intervals by qualified biologists to minimize the chance for mortality of adult steelhead in the “live box”, and to ensure that no fish have been entrained in mesh anywhere along the length of the trap.
- **Traps can’t be maintained in place at all times steelhead are migrating:** Unless operated continuously across the entire migratory period, trapping will provide an incomplete assessment of adult steelhead migration into Arroyo Grande Creek and would not be a reliable method of informing criteria for closure of the Arroyo Grande Creek vehicular crossing.
- **Existing Trap Design does not assess outmigrating kelts and smolts:** Unless a downstream migrant trap is used, trapping efforts will be unable to assess the migration of steelhead smolts and kelts into the Arroyo Grande Creek lagoon and past the vehicular crossing

OTHER NOTES:

- (1) Initial simulations indicated that passage at low tide would require extremely high stage levels at the pressure transducer. **This indicates that upstream passage is generally going to be at high tide.** At high tide, an upstream boundary condition of 8.97 feet resulted in a continuous thalweg depth of 0.7 feet or greater. **Based on the pressure transducer data, this would correspond to a gage value on the San Luis Obispo County**

website of 9.22 feet. This gage criteria may cause beach closure to traffic 1.4% percent of the time during steelhead migration season.

NOTE: Tidal level was determined to have a greater influence in providing fish passage than was flow. This appears to be based on a couple of factors: (i) flows tend to “fan out” across the beach with little depth and also (ii) locations where the flow fans out is just above high tide, so backwater effects from high tide dampen changes in depth with flow.

- (2) Because the fish passage flow equivalent is estimated to be 240 cfs, increased releases from Lopez Lake per recent litigation and the ongoing development of the Habitat Conservation Plan (HCP) isn’t expected to be sufficient to substantially affect closure to traffic.
- (3) There will be a need to re-evaluate passage in the future if there are substantial changes to channel morphology.

INTRODUCTION

The purpose of this investigation was to develop a tool to predict conditions at which upstream passage of adult steelhead from the Pacific Ocean into Arroyo Grande is likely to occur, based on stage levels at the San Luis Obispo County Arroyo Grande Lagoon gage No. 769 (https://wr.slocountywater.org/sensor/?site_id=11&site=e34cef5c-5976-432a-9cd9-ac6cf5d9cf7a&device_id=1&device=56a57c26-9b2b-415a-a5af-d9e9bb5d7f53). Based on aerial imagery from Google Earth, the location of the channel into the Pacific Ocean varies significantly from year to year (Figure 1). Arroyo Grande Creek below Lopez Dam is closed to all fishing all year.

METHODS

Four RTK GPS receivers were used to collect topographic data for the Arroyo Grande channel on January 29, 2025 (Figures 2 and 3). All topographic data were in California State Plane Zone 5 NAD83 feet, with the NAVD88 vertical datum. A pressure transducer was installed near the downstream end of the Arroyo Grande Lagoon. One of the RTK GPS units was used to measure the water surface elevation at the pressure transducer, as well as at the San Luis Obispo County Arroyo Grande Lagoon gage No. 769 at 10 AM on January 29, 2025. A barometer was installed at the State Parks Oceano Dunes entrance booth to correct the pressure transducer readings for barometric pressure. The pressure transducer and barometer were set to record observations every 15 minutes, starting at 10 AM on January 29, 2025 and ending at 9:45 AM on February 26, 2025.



Figure 1
Arroyo Grande Channel Alignments (Red Lines). Yellow Pushpin is the Alignment in January 2025.



Figure 2
Arroyo Grande 1/29/25, 12:16 PM, Tide = 3.92 feet



Figure 3
Arroyo Grande Vehicle Crossing, 1/29/25, 2:10 PM, Tide = 0.37 feet

A raster was created from the RTK GPS data, and overlaid on top of LIDAR data downloaded from <https://apps.nationalmap.gov/downloader/#/> to create an initial terrain in the U.S. Army Corps of Engineers Hydrologic Engineering Center's River Analysis System (HEC-RAS) computer software program Version 6.5 (USACE 2024). A 2D flow area with a three foot computational mesh and a Manning's n value of 0.03 was created. The SWE-ELM equation set and the conservative turbulence model were used, with a longitudinal mixing coefficient of 0.3, a lateral mixing coefficient of 0.1, and a Smagorinsky coefficient of 0.05. The model had stage hydrograph inflow and outflow boundary conditions, with low and high tide used for the downstream boundary condition and stage at the pressure transducer used for the upstream boundary condition. The model was run at both low and high tides for a range of upstream stage values. Adult steelhead passage was predicted when the thalweg depth was consistently at least 0.7 feet, per CDFW (2017).

RESULTS

A total of 7,905 topographic data points were collected. The water surface elevation at the pressure transducer was 8.71 feet, while the water surface elevation at the San Luis Obispo County gage was 9.52 feet. The corresponding gage value given on the San Luis Obispo County website was 9.05 feet. Average high tide is 5.47 feet, while average low tide is -0.11 feet. Topographic data was not collected far enough into the ocean to simulate low tide. As a result, 1 foot was used for the downstream boundary condition for low tide. Initial simulations indicated that passage at low tide would require extremely high stage levels at the pressure transducer. This indicates that upstream passage is generally going to be at high tide. At high tide, an upstream boundary condition of 8.97 feet resulted in a continuous thalweg depth of 0.7 feet or greater. Based on the pressure transducer data, this would correspond to a gage value on the San Luis Obispo County website of 9.31 feet. As shown in Figure 4, there was a reasonably strong relationship between the pressure transducer and San Luis Obispo County gage, although the relationship appeared to shift after the high flow on 2/13/25. Using the relationship after 2/13/25, an upstream boundary of 8.96 feet would be equivalent to a stage of 9.22 at the San Luis Obispo county gage.

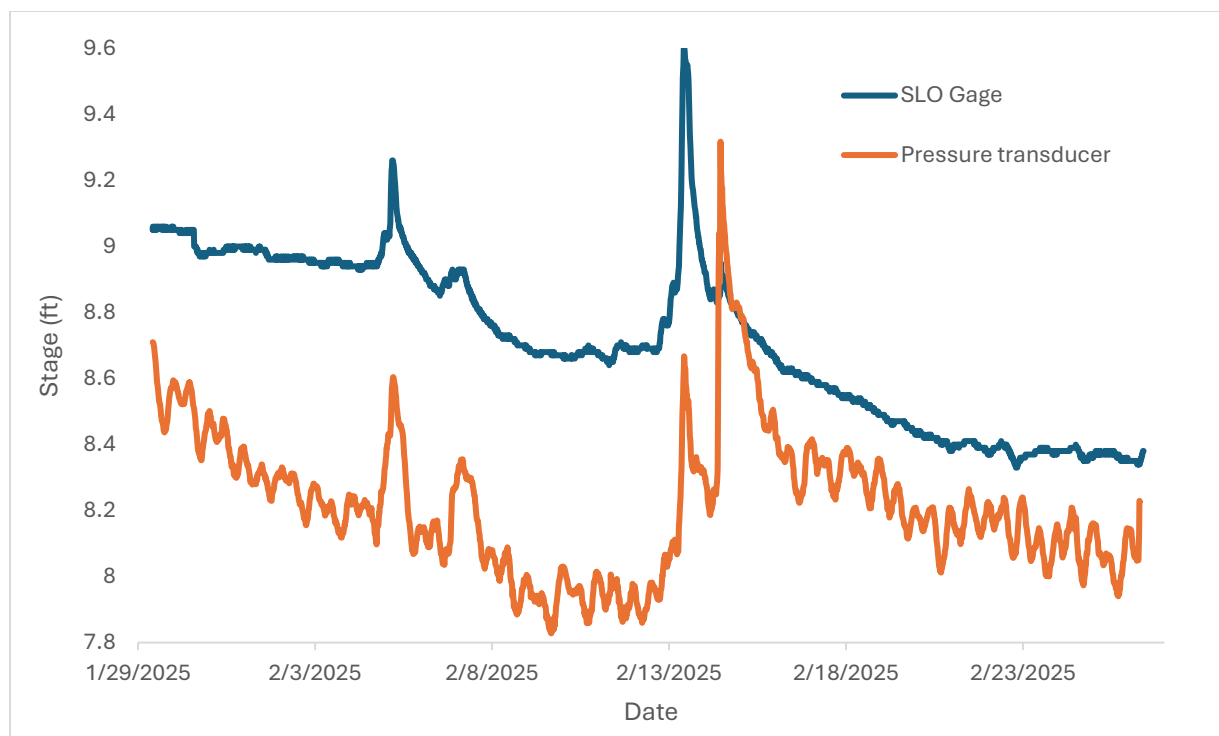


Figure 4
Pressure Transducer and SLO Gage Stages During Pressure Transducer Deployment

DISCUSSION

For a given channel alignment, a gage value of 9.22 feet or greater on the San Luis Obispo County website should consistently correspond with conditions at which adult steelhead passage occurs, per the concept of dynamic equilibrium, where the specific most critical condition, although it may move spatially, will be consistent in terms of its relationship with upstream stage. The portion of Arroyo Grande below high tide did not have a defined channel and was over 300 feet wide, resulting in a very high stage needed to provide upstream passage. In contrast, the portion of Arroyo Grande above high tide had a defined channel and a wetted width of under 140 feet, allowing for upstream passage at a much lower upstream stage (Figure 5). It is recommended that the surveys and modeling presented here be redone whenever there is a significant change in the channel alignment.

The 0.7 foot depth criterion provides for unobstructed passage of the full size range of adult steelhead with no injury from abrasion with the stream bottom. A shallower depth, such as 0.5 feet, would allow smaller adult steelhead to pass with some risk of injury of larger fish due to abrasion with the stream bottom. A stage of 8.86 feet at the pressure transducer would provide at least a 0.5 foot thalweg depth at high tide. This would correspond to 9.12 feet at the San Luis

Obispo County gage, or a 1.9% closure during the steelhead migration season. The fish passage flow equivalent to a stage of 8.86 feet at the pressure transducer would be 162 cfs. In comparison, the highest pulse flow from Lopez Lake per recent litigation and the ongoing development of the Habitat Conservation Plan (HCP) is 50 cfs.

Steelhead smolt outmigration would require a thalweg depth of 0.3 feet. Conditions during the survey (pressure transducer elevation of 8.71 feet with corresponding flow of 4 cfs) had a continuous thalweg depth at high tide of at least 0.16 feet. This would correspond to 8.97 feet at the San Luis Obispo County gage, or a 16.9% closure during the steelhead migration season.

On March 5, 2025 at 6:30 AM an adult steelhead was migrating from the ocean into Arroyo Grande Creek. The San Luis Obispo County gage was reading 8.53 at that time. This would likely be the most protective standard that could be used to trigger beach closures. This value is exceeded 43.5 percent of the time during the steelhead migration period. Note there is considerable uncertainty in the relationship between levels at San Luis Obispo County gage and percent beach closure, since the historic record corresponding to the current location of the Arroyo Grande Creek outlet is only from April 1, 2024 to April 10, 2025.

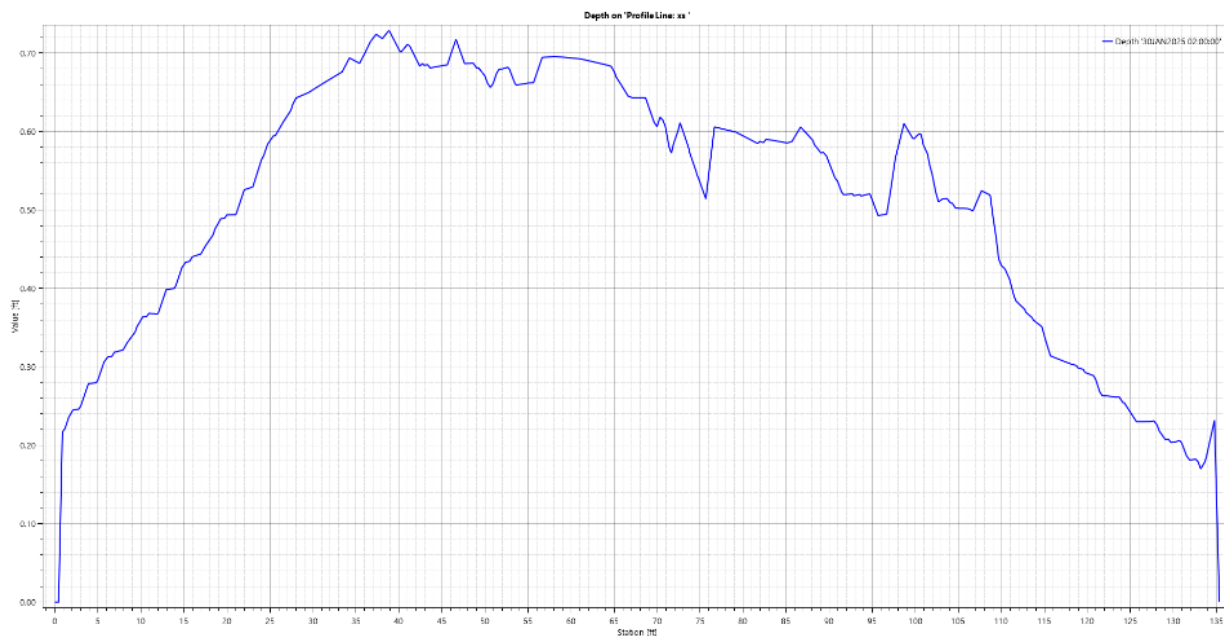


Figure 5

Arroyo Grande Channel Cross-section at Upstream Stage of 8.97 and High Tide

REFERENCES

CDFW. 2017. Standard Operating Procedure for Critical Riffle Analysis for Fish Passage in California. CDFW-IFP-001. September 2017.

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USACE. 2024. HEC-RAS river analysis system. Version 6.5 [computer software]. U.S. Army Corps of Engineers, Hydraulic Engineering Center (HEC), Davis, CA: 24. Available: <https://www.hec.usace.army.mil>

Attachment 1

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM
(MMRP)**

**PROJECT: Oceano Dunes District Habitat Conservation Plan (HCP)
(Plan)**

State Clearinghouse No.: 2018011012

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
Crotch's Bumble Bee (CBB)	
Recommended Mitigation Measure 1: CBB Habitat Assessment	
Recommended Mitigation Measure 2: CBB Surveys	
Recommended Mitigation Measure 4: CBB Take Authorization	
<i>During Construction</i>	
Crotch's Bumble Bee (CBB)	
Recommended Mitigation Measure 3: CBB Avoidance	