



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Northern Region
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GAVIN NEWSOM, Governor
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October 1, 2026

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**SUBJECT: SAMOA PENINSULA WATERLINE RIGHT-OF-WAY MAINTENANCE PROJECT
DRAFT EIR (SCH# [2023100565](#))**

Dear Michiko Mares,

On August 20, 2026, the California Department of Fish and Wildlife (CDFW) received a Draft Environmental Impact Report (DEIR) from the Humboldt Bay Municipal Water District (District; Lead Agency) for the Samoa Peninsula Waterline Right-of-Way Maintenance Project (Project). CDFW appreciates the opportunity to provide feedback and understands the Lead Agency will accept comments through October 5, 2026.

As the Trustee Agency for the State's fish and wildlife resources, CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary to sustain their populations (Fish & G. Code, §§ 1801 & 1802). As a Responsible Agency, CDFW administers the California Endangered Species Act (CESA) and other provisions of the Fish and Game Code that conserve the State's fish and wildlife public trust resources. CDFW offers the following comments and recommendations in our role as Trustee and Responsible Agency pursuant to the California Environmental Quality Act (CEQA; Pub. Resources Code, §21000 et seq.). These comments are intended to minimize Project impacts on public trust resources.

Project Description

The Project is located on the Samoa Peninsula in coastal Humboldt County, California. The District supplies drinking water to wholesale municipal customers,

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including the cities of Eureka, Arcata, and Blue Lake, as well as community service districts (CSDs) that serve unincorporated communities in the Humboldt Bay area. A separate commercial system delivers non-potable water for commercial uses and fire suppression on the Samoa Peninsula. The District currently performs routine maintenance within its right-of-way (ROW), though on a reduced schedule due to declines in industrial demand over the last several decades. However, to maintain access for repairs, the District needs to increase ROW maintenance work. The Project would authorize long-term maintenance of existing potable and non-potable water transmission infrastructure located on the Samoa Peninsula. Project activities include vegetation management along roads and utility corridors, maintenance and protection of infrastructure, reburial of exposed pipelines, replacements of electrical conduits and poles, and compensatory mitigation in the form of habitat restoration. The lifespan or operational period of the Project is assumed to be 50 years.

CDFW Consultation History

CDFW commented on the Notice of Preparation (NOP) for the DEIR circulated in 2023. In the intervening years, CDFW has engaged with the District regarding CESA-listed species and attended several meetings as well as a site visit.

Biological Significance

The Samoa Peninsula is a diverse mosaic of wetland, riparian, coastal dune, and upland forest habitats, many of which are considered Sensitive Natural Communities (SNCs) due to rarity and threats. These diverse ecosystems provide essential habitat for numerous special status plants and wildlife, including several species listed or proposed for candidacy pursuant to the California Endangered Species Act and the federal Endangered Species Act. Notable examples include beach layia (*Layia carnosa*; SE¹, FT) and Menzies' wallflower (*Erysimum menziesii*; FE, SE), both of which occupy dune mat habitat and open sandy areas. Other characteristic dune mat species include dark-eyed gilia (*Gilia millefoliata*; CRPR 1B.2), short-leaved evax (*Hesperis matronalis* var. *brevifolia*, CRPR 1B.2), and American glehnia (*Glehnia littoralis* ssp. *leiocarpa*; CRPR 4.2). Special status wildlife known or likely to occur in the Project area include white-tailed kite (*Elanus leucurus*; FP), northern harrier (*Circus hudsonius*; SSC), and

¹ Abbreviations: SE – state-endangered; FT – federally threatened; FE – federally endangered; CRPR – California Rare Plant Rank; FP – CDFW Fully Protected Species; SSC – CDFW Species of Special Concern; SC – state candidate for listing

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northern red-legged frog (*Rana aurora*; SSC), among others. There are also several historical occurrences of western bumble bee (*Bombus occidentalis*; SC), which is currently a candidate species pursuant to CESA.

Comments and Recommendations

Responsible Agency

Project-related activities that may result in take² of CESA-listed species require authorization from CDFW pursuant to Fish and Game Code section 2081, subdivision (b) and California Code of Regulations Title 14 (14 CCR) section 783 et seq. In its capacity as a Responsible Agency, CDFW has determined the Project as proposed will likely result in take of Menzies' wallflower and beach layia. CDFW therefore recommends the District obtain take coverage for these species through an Incidental Take Permit (ITP) (**Recommendation 1**). CDFW encourages early consultation to ensure conditions set forth in Fish and Game Code section 2081, subdivisions (b) and (c) are met. (See Cal. Code Regs., tit. 14, § 783.4.) (**Recommendation 2**).

Menzies' Wallflower and Beach Layia

Although the DEIR acknowledges the potential for significant impacts to Menzies' wallflower and beach layia, it does not fully disclose or evaluate all impacts. The Project may not result in permanent habitat conversion, but it does involve regular habitat modification, which may adversely affect the seed bank, introduce or propagate invasive species, and interfere with dispersal, among other effects. The DEIR indicates that habitat-level impacts will be mitigated through enhancement and restoration of two SNCs directly affected by Project activities, Dune Mat and Seaside Woolly Sunflower–Seaside Daisy–Buckwheat Patches. However, this approach would not fully mitigate impacts to rare plant habitat because it relies exclusively on the extent of SNCs, omitting other habitats that support both species. This is particularly problematic for beach layia, which frequently occupies open sand and therefore does not always meet the membership rules for either SNC. For example, the sand borrow area is mapped as beach layia, with only a fraction of that total area qualifying as Dune Mat or Woolly Sunflower–Seaside Daisy–Buckwheat Patches. By combining

² "Take" means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill (Fish & G. Code, § 86).

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mitigation for habitat-level impacts to rare plants with SNC restoration, the current approach does not fully evaluate or mitigate impacts to either species.

Menzies' wallflower and beach layia favor sparsely vegetated, open areas in semi-stable foredune and are adapted to sand movement associated with coastal dune processes (USFWS 1998). Given the juxtaposition of the Project, it is reasonably foreseeable that these wind-dispersed species will recolonize the Project footprint following disturbance and be exposed to the next scheduled maintenance activity. In other words, the Project footprint may represent an ecological trap with ongoing take. The DEIR currently proposes to mitigate for Menzies' wallflower based on the number of individual plants impacted. However, current estimates are derived from static census data and therefore cannot account for the seed bank or natural recolonization. Rather than attempting to forecast take over the life of the Project, this oversight could be resolved through a holistic approach that includes habitat-level impacts. Impacts would be evaluated in terms of occupied habitat, defined as suitable habitat around existing individuals or populations. Unlike the current strategy, this approach would account for impacts to the seed bank as well as indirect impacts to habitat. Be aware that issuance of an ITP is predicated in part on whether the impacts of take are fully mitigated, where "impacts of take" include all impacts resulting from an act that could cause take. (See Cal. Code Regs., tit. 14, § 783.4, subd. (a)(2).) This includes habitat modification resulting from road grading and sand borrow operations, both of which are anticipated to cause take of individual plants. Impacts would also extend to mitigation activities, such as seed collection, propagation, and habitat restoration. To fully evaluate and mitigate impacts to Menzies' wallflower and beach layia, CDFW recommends reframing the analysis to focus on occupied habitat **(Recommendation 3)**.

As written, the DEIR does not propose direct mitigation for take of beach layia. Seasonal avoidance as outlined in the DEIR (BIO-1) is not feasible because seeds are present during the dry season after plants senesce and can germinate as early as late fall (USFWS 1998). Preservation of the seed bank through topsoil salvage (BIO-2) is also unlikely to result in substantive mitigation. Topsoil salvage alone may have little effect on passive recolonization and may facilitate the spread of invasive species (Hinshaw et al. 1998, Dixon 2018). CDFW does not recommend seasonal avoidance or topsoil salvage as standalone mitigation for beach layia, and instead recommends the District adopt a more direct

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approach through habitat restoration (**Recommendation 4**), which offers the greatest ecological benefit to coastal dune species on the Samoa Peninsula.

Special Status Bumble Bees

Western bumble bee is currently a candidate for listing pursuant to CESA and may therefore qualify as an endangered, rare, or threatened species under CEQA (Cal. Code Regs., tit. 14, § 15380). Western bumble bee has experienced an 84% decline in relative abundance and occupies less than 50% of its historic range (Xerces Society et al. 2018). Due to range contractions, populations are currently restricted to higher elevations in the Sierra Nevada, with a few observations in northern California (Xerces Society et al. 2018, Xerces Society et al. 2026). Although there have been no recent sightings on the coast, there are historical occurrences of western bumble bee on the Samoa Peninsula (CDFW 2026). The DEIR contains a single reference to a sighting of western bumble bee and Crotch's bumble bee (*Bombus crotchii*; SC), but CDFW understands this was an error. Regardless, the Project site contains suitable foraging and nesting habitat. Vegetation removal and ground disturbance have the potential to adversely impact bumble bees and their habitat through loss of floral resources, burrow collapse, nest abandonment, and direct mortality.

Although the DEIR acknowledges the potential for special status bumble bees, preconstruction surveys may fail to detect species presence because the strategy hinges on identifying nests, which are notoriously difficult to find, even for experienced biologists (Licznar and Colla 2019). To evaluate presence and potential impacts to special status bumble bees, CDFW recommends conducting seasonally appropriate protocol-level surveys (**Recommendation 5**). Non-lethal photo vouchers, as described in the [California Bumble Bee Atlas Point Surveys](#) or the [USFWS Survey Protocols for Rusty Patched Bumble Bee](#), are considered the most efficient and accurate means of identifying bumble bees without causing unnecessary harm. However, capture is a form of *take* and would require additional authorization from CDFW (Fish & G. Code §§ 1002, 1002.5, 1003, & 2081 subd. (a)). The District should consult with CDFW regarding capture and handling of special status bumble bees, as well as potential avoidance and minimization measures if candidate species are detected (**Recommendation 6**). If take cannot be avoided, CDFW recommends the District obtain coverage for candidate species through an ITP, which can be incorporated into the permit for Menzies' wallflower and beach layia (**Recommendation 7**).

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Trustee Agency

Special Status Plants and Sensitive Natural Communities

The DEIR considers impacts to unlisted special status plant species, two of which will be directly affected by Project activities: dark-eyed gilia and American glehnia. As with beach layia, CDFW has reservations about the effectiveness of proposed minimization measures but supports the concept of mitigating through habitat restoration (BIO-3). However, without a basic framework for mitigation, special status plant species may be inadvertently overlooked. The DEIR outlines mitigation ratios for impacted SNCs, and although it mentions success criteria, it never defines them. To ensure that impacts to unlisted special status plants are offset through habitat restoration, CDFW recommends including them in performance standards and success criteria for SNC mitigation (**Recommendation 8**). They may passively recolonize newly restored habitat, but monitoring and adaptive management should ensure their presence.

Mitigation Measures

Compensatory mitigation for Project impacts to special status plants and SNCs will entail habitat enhancement and active restoration through invasive species removal. Invasive, non-native species pose the greatest threat to native dune communities, such that their control is consistently listed as a priority for conservation. When implemented as part of a long-term management plan, the proposed methods of removal are very effective. However, many of them involve ground disturbance or other impacts that may warrant consideration. Pursuant to CEQA, all phases of a project must be considered when evaluating its impact on the environment (Cal. Code Regs., tit. 14, § 15126), including the effects of mitigation. (*Id.* 15126.4, subd. (a)(1)(d).) CDFW recommends including a brief discussion of potentially significant impacts associated with restoration activities (**Recommendation 9**).

Summary of Recommendations

- 1) Obtain take coverage for Menzie's wallflower and beach layia through an Incidental Take Permit (ITP).
- 2) Consult with CDFW to ensure conditions set forth in Fish and Game Code section 2081, subdivisions (b) and (c) are met. (See Cal. Code Regs., tit. 14, § 783.4.)

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- 3) To fully evaluate and mitigate impacts to Menzies' wallflower and beach layia, reframe the analysis to focus on occupied habitat.
- 4) Adopt a more direct approach to beach layia mitigation through habitat restoration rather than relying on seasonal avoidance and topsoil salvage.
- 5) To evaluate presence and potential impacts to special status bumble bees, conduct seasonally appropriate protocol-level surveys.
- 6) Consult with CDFW regarding capture and handling of special status bumble bees, as well as potential avoidance and minimization measures if candidate species are detected.
- 7) If take cannot be avoided, obtain coverage for candidate species through an ITP, which can be incorporated into the permit for Menzies' wallflower and beach layia.
- 8) To ensure that impacts to unlisted special status plants are offset through habitat restoration, include them in performance standards and success criteria for SNC mitigation.
- 9) Include a brief discussion of potentially significant impacts associated with restoration activities.

Thank you for the opportunity to comment on this DEIR. Please contact Kathryn Rian, Environmental Scientist, at Kathryn.Rian@wildlife.ca.gov with any questions or comments.

Sincerely,

DocuSigned by:

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- Xerces Society, Defenders of Wildlife, and Center for Food Safety. 2018. A petition to the State of California Fish and Game Commission to list the Crotch bumble bee (*Bombus crotchii*), Franklin's bumble bee (*Bombus franklini*), Suckley cuckoo bumble bee (*Bombus suckleyi*), and western bumble bee (*Bombus occidentalis occidentalis*) as Endangered under the California Endangered Species Act. Available from [A Petition to the State of California Fish and Game Commission to List Four Bumble Bees as Endangered under the California Endangered Species Act | Xerces Society](#).

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Xerces Society, Wildlife Preservation Canada, York University, University of Ottawa, The Montreal Insectarium, The London Natural History Museum, Bee Spotter. 2026. Data accessed from Bumble Bee Watch, a collaborative website to track and conserve North America's bumble bees. Retrieved August 28, 2026 from [Bumble Bee Watch](#).