



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
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GAVIN NEWSOM, Governor
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November 15, 2024

Francine Bangert
Orange County Waste & Recycling
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Ocwr-ceqareview@ocwr.ocgov.com

Initial Study and Mitigated Negative Declaration for the Bowerman Power Renewable Natural Gas Plant Project, SCH No. 2024100760, Orange County, CA

Dear Francine Bangert:

The California Department of Fish and Wildlife (CDFW) reviewed the Initial Study and Mitigated Negative Declaration (IS/MND) from Orange County Waste & Recycling (OCWR) for the Bowerman Power Renewable Natural Gas Plant Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines¹.

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

CDFW ROLE

CDFW is California’s Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Fish & G. Code, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW may also act as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise

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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regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law² of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.) or the Native Plant Protection Act (NPPA; Fish & G. Code, §1900 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

CDFW also administers the Natural Community Conservation Planning (NCCP) program, a California regional habitat conservation planning program. The County of Orange participates in the NCCP as a Signatory to the Implementation Agreement (IA) under the County of Orange Central and Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). OCWR operates and maintains the Frank R. Bowerman (FRB) Landfill which is located within the NCCP/HCP Reserve.

PROJECT DESCRIPTION SUMMARY

Proponent: Orange County Waste & Recycling (OCWR) and Bowerman Power

Objective: The Project Proponent is proposing to develop a Renewable Natural Gas (RNG) plant at the FRB Landfill on land at FRB Landfill leased to Bowerman Power by OCWR. The RNG Plant will be designed to process the excess landfill gas (LFG) that would otherwise require incineration at the existing adjacent flare station, and then deliver the processed RNG to Southern California Gas Company (SoCalGas). The Project will consist of three areas where disturbances will occur: the new Project RNG Plant, the new SoCalGas pipeline, and the existing soil stockpile area. The RNG Plant site involves 3.52 acres of part of the undeveloped land leased by Bowerman Power, 19.6-megawatt landfill gas to energy facility and the FRB Landfill flare station. Approximately 70,000 cubic yards of fill material will be extracted from an existing soil stockpile area within the FRB Landfill boundaries and will be used to provide fill materials for the RNG Plant pad including a point of receipt (POR) facility to be developed and operated by SoCalGas. There will also be a Fuel Modification Area that will be located adjacent to the Project site and will be cleared of vegetation and revegetated post construction with approved low fuel vegetation.

Location: The proposed RNG Plant is located at the Frank R. Bowerman (FRB) Landfill at 11006 Bee Canyon Access Road in unincorporated Orange County, California, north and within the sphere of influence of the City of Irvine. The Project involves constructing an RNG processing plant and a new SoCalGas pipeline connecting the processing plant to an existing SoCalGas pipeline at the corner of Portola Parkway and Jeffrey Road. The surrounding land uses consist of Open Space Reserve. State Routes 241 and 133

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

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are located to the west, approximately 0.5 miles and 0.6 miles. Interstate 5 is located 3.8 miles to the west, and Interstate 405 is located 5.4 miles to the southwest.

Timeframe: Construction is anticipated to begin in 2025 and is expected to occur over a span of 2 years.

Biological Setting: The Project site is surrounded by NCCP/HCP Reserve open space. The topography of the site consists of hilly terrain throughout. A concrete channel is located at its southern end and conveys water from the ephemeral drainages. Surrounding land uses include the larger Bowerman Landfill, agricultural land, open space, highways, and roads.

Biological surveys, including a rare plant survey, were conducted on June 19, 2023. The Biological Survey Area (BSA) included the Project site, the Fuel Modification Area, and the proposed pipeline. Per the Biological Survey Report (BSR; Tetra Tech 2024), the site contains multiple vegetation communities: sagebrush scrub (13.3 acres), disturbed sagebrush scrub (0.2 acre), coast live oak (1.8 acres), eucalyptus (1.2 acres), ornamental trees (1.0 acre), disturbed (2.4 acres) and developed (18.9 acres). During the biological surveys, only one rare plant was found, intermediate mariposa lily (*Calochortus weedii* var. *intermedius*) and no special-status wildlife species were identified. Although the survey results did not include any sensitive wildlife species, the areas surrounding the Project site support several special-status species including, but not limited to, coastal California gnatcatcher (gnatcatcher; *Polioptila californica californica*; CDFW Species of Special Concern (SSC), federal Endangered Species Act (ESA) listed-threatened) and), least Bell's vireo (*Vireo bellii pusillus*; CESA listed-endangered, ESA listed-endangered) Crotch's bumble bee (*Bombus crotchii*; CESA candidate species)), western spadefoot (*Spea hammondi*); California SSC and ESA Candidate species)), and orange-throated whiptail (*Aspidoscelis hyperythrus*).

Project History: CDFW and the United States Fish and Wildlife Service (USFWS) (jointly the Wildlife Agencies) had several discussions in 2023-2024 through virtual meetings and emails with Weena Dalby, the Environmental Engineering Specialist for OCWR, regarding impacts to intermediate mariposa lilies (IML) onsite. IML is a Covered Species under the NCCP/HCP, and any impacts to the species require coordination with the Wildlife Agencies. On July 8th (USFWS) and July 11th (CDFW) 2024, the Wildlife Agencies approved the proposal from OCWR to mitigate for the cumulative and direct impacts to a population of approximately 20 individuals of IML by using the in-lieu fee option under the NCCP/HCP. The total in-lieu fee would be \$58,041 and it would be given to the NCCP/HCP Implementation Entity the Natural Communities Coalition (NCC).

COMMENTS AND RECOMMENDATIONS

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

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resources, and to ensure regional conservation objectives in the County of Orange Central and Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan would not be eliminated by implementation of the Project.

COMMENT # 1: Impacts on Crotch's Bumble Bee

Issue: Project activities may result in incidental take of Crotch's bumble bee and indirect and cumulative impacts to Crotch's bumble bee, a candidate species for CESA listing. The IS/MND does not provide avoidance, minimization, and/or mitigation measures to reduce the impact to Crotch's bumble bee to less than significant. Crotch's bumble bee is not a Covered Species under the NCCP/HCP, therefore the County of Orange does not have take coverage.

Specific impact: The Project may result in temporary or permanent loss of suitable nesting and foraging habitat of Crotch's bumble bee. Project ground-disturbing activities may cause death or injury of adults, eggs, and larva; burrow collapse; nest abandonment; and reduced nest success.

Why impact would occur: According to [California's Natural Diversity Database \(CNDDDB\)](#), observations of Crotch's bumble bee have been recorded throughout Orange County (CDFW 2024a) and near the BSA. Additionally, [iNaturalist](#) has recent expert-verified observations of Crotch's bumble bee within Orange County (iNaturalist 2024). As with any flying species, Crotch's bumble bee may fly throughout the County and utilize areas that have suitable nesting habitat and floral resources. The vegetation identified within the Project site has the potential to provide suitable nesting and foraging habitat for this species. As for nesting habitat, Crotch's bumble bee primarily nest in late February through late October underground in abandoned small mammal burrows but may also nest under perennial bunch grasses or thatched annual grasses, under-brush piles, in old bird nests, and in dead trees or hollow logs (Williams et al. 2014; Hatfield et al. 2018). Overwintering sites utilized by Crotch's bumble bee mated queens include soft, disturbed soil (Goulson 2010), or under leaf litter or other debris (Williams et al. 2014). Ground disturbance and vegetation removal associated with Project implementation during the breeding season could result in the incidental loss of breeding success or otherwise lead to nest abandonment in areas adjacent to the Project site. The IS/MND does not discuss the Project's impact on Crotch's bumble bee. Furthermore, the IS/MND does not provide specific avoidance and minimization measures directly related to Crotch's bumble bee. Without sufficient species-specific avoidance, minimization, or mitigation measures, impacts to Crotch's bumble bee may occur.

Evidence impact would be significant: Impacts to CESA-listed species and their habitat meet the definition of endangered, rare, or threatened under CEQA (CEQA Guidelines § 15380). Impacts to CESA listed species and their habitats may result in a mandatory finding of significance because the Project has the potential to substantially

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reduce the number or restrict the range of an endangered, rare, or threatened species (CEQA Guidelines § 15065).

Recommended Potentially Feasible Mitigation Measure(s)

Mitigation Measure #1: Crotch's Bumble Bee Surveys - Within one year prior to vegetation removal and/or grading, a qualified entomologist/biologist with appropriate handling permits and is familiar with the species behavior and life history, shall conduct focused surveys to determine the presence/absence of Crotch's bumble bee. Focused surveys shall follow CDFW's [Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species](#) (CDFW 2023) and shall be developed in consultation with CDFW. Focused surveys shall also be conducted throughout the entire Project site when the species is most likely to be active and detected above ground, between March 1 to September 1. Survey results, including negative findings, shall be submitted to CDFW prior to implementing Project-related ground-disturbing activities. At minimum, a survey report shall provide the following:

- 1) a description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch's bumble bee;
- 2) field survey conditions that shall include name(s) of qualified entomologist(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched;
- 3) map(s) showing the location of nests/colonies; and,
- 4) a description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found. A sufficient description of biological conditions, primarily impacted habitat, shall include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species).

Mitigation Measure #2: Avoidance Plan - If Crotch's bumble bee is detected, the Project applicant in consultation with a qualified entomologist/biologist and CDFW shall develop a plan to fully avoid impacts to Crotch's bumble bee. The plan shall include effective, specific, enforceable, and feasible measures. An avoidance plan shall be submitted to CDFW prior to implementing Project-related ground-disturbing activities and/or vegetation removal where there may be impacts to Crotch's bumble bee.

Mitigation Measure #3: Incidental Take Permit - If Crotch's bumble bee is detected and if impacts to Crotch's bumble bee cannot be feasibly avoided, the Project applicant shall consult with CDFW and obtain appropriate take authorization from CDFW (pursuant to Fish & G. Code, § 2080 et seq.). The Project applicant shall comply with the mitigation measures detailed in the take authorization issued by CDFW. The Project

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applicant shall provide a copy of a fully executed take authorization prior to the issuance of a grading permit and before any ground disturbance and vegetation removal.

ADDITIONAL COMMENTS

1. **Mitigation for Impacts to Intermediate Mariposa Lily.** While surveys identified 19 IML individuals within the Project footprint, the actual population is likely higher due to the species' perennial nature and reliance on favorable conditions for emergence. Therefore, it is likely there are more IML corms within the Project impact area than would be detected from surveys for vegetation.

Additionally, the IS/MND indicates construction is proposed to begin the first quarter of 2025, which would not be late enough to perform adequate plant surveys to during the IML growing season. To ensure accurate population counts and appropriate mitigation, CDFW, in consultation with USFWS, recommends the CEQA document include Mitigation Measure #4 below:

Mitigation Measure #4: Additional Surveys - OCWR shall delay Project construction to facilitate completion of IML-focused surveys during the IML growing season. A qualified botanist shall complete multiple IML focused surveys throughout the blooming period, typically May through July, to properly document the number of vegetative and flowering plants. OCWR shall mitigate through the in-lieu fee system as agreed upon by the Wildlife Agencies.

Mitigation and Monitoring Reporting Plan. CDFW recommends the Project's environmental document include mitigation measures recommended in this letter. CDFW has provided comments via a mitigation monitoring and reporting plan to assist in the development of feasible, specific, detailed (i.e., responsible party, timing, specific actions, location), and fully enforceable mitigation measures (CEQA Guidelines, § 15097; Pub. Resources Code, § 21081.6). The Lead Agency is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. Per Public Resources Code section 21081.6(a)(1), CDFW has provided a summary of our suggested mitigation measures and recommendations in the form of an attached Draft Mitigation Monitoring and Reporting Plan (Attachment A).

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

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Database (CNDDDB). The [CNDDDB website](#)³ provides direction regarding the types of information that should be reported and allows on-line submittal of field survey forms.

In addition, information on special status native plant populations and sensitive natural communities, should be submitted to CDFW's Vegetation Classification and Mapping Program using the [Combined Rapid Assessment and Relevé Form](#)⁴.

OCWR should ensure data collected for the preparation of the IS/MND is properly submitted.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document 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 environmental document filing 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 IS/MND to assist OCWR in identifying and mitigating Project impacts on biological resources. CDFW requests an opportunity to review and comment on any response that the OCWR has to our comments and to receive notification of any forthcoming hearing date(s) for the Project (CEQA Guidelines, § 15073(e)).

Questions regarding this letter or further coordination should be directed to Emily Gray⁵, Environmental Scientist.

Sincerely,

Signed by:



AD7D070BCB66466...

Glen M. Lubcke
Environmental Program Manager
South Coast Region

³ <https://wildlife.ca.gov/Data/CNDDDB>

⁴ <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Submit>

⁵ Email: Emily.gray@wildlife.ca.gov

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ATTACHMENTS

Attachment A: Draft Mitigation, Monitoring, and Reporting Program

ec: California Department of Fish and Wildlife
Glen M. Lubcke, Environmental Program Manager (NCCP, Mitigation Banking)
Jennifer Turner, Senior Environmental Scientist (Supervisory; CEQA)
Steve Gibson, Senior Environmental Scientist (Supervisory; CESA)
Frederick (Fritz) Rieman, Senior Environmental Scientist (Supervisory; LSA)
Melanie Burlaza, Senior Environmental Scientist (Supervisory; NCCP)

United States Fish and Wildlife Service
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REFERENCES

California Department of Fish and Wildlife. (2023). *Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species*. Available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline>

Goulson, D. 2010. *Bumblebees: behavior, ecology, and conservation*. Oxford University Press, New York. 317pp.

Hatfield, R., Jepsen, S., Foltz Jordan, S., Blackburn, M., Code, Aimee. 2018. A Petition to the State of California Fish and Game Commission to List Four Species of Bumblebees as Endangered Species.

iNaturalist. 2024. Crotch's Bumble Bee Observations. Available at: <https://www.inaturalist.org/observations>

Natural Community Conservation Plan and Habitat Conservation Plan. County of Orange Central and Coastal Subregion NCCP/HCP. 1996.

Tetra Tech. Biological Survey Report for Bowerman Power Renewable Natural Gas Plant Project. October 2024.

Williams, P. H., R. W. Thorp, L. L. Richardson, and S.R. Colla. 2014. *Bumble bees of North America: An Identification guide*. Princeton University Press, Princeton, New Jersey. 208pp.

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ATTACHMENT A: DRAFT MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

CDFW provides the following language to be incorporated into the MMRP for the Project.

Mitigation Measure	Timing	Responsible Party
<p>Mitigation Measure #1: Crotch’s Bumble Bee Surveys</p> <p>Within one year prior to vegetation removal and/or grading, a qualified entomologist/biologist with appropriate handling permits and is familiar with the species behavior and life history, shall conduct focused surveys to determine the presence/absence of Crotch’s bumble bee. Focused surveys shall follow CDFW’s Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (CDFW 2023b) and shall be developed in consultation with CDFW. Focused surveys shall also be conducted throughout the entire Project site when the species is most likely to be active and detected above ground, between March 1 to September 1. Survey results, including negative findings, shall be submitted to CDFW prior to implementing Project-related ground-disturbing activities. At minimum, a survey report shall provide the following:</p> <ol style="list-style-type: none"> 1) a description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch’s bumble bee; 2) field survey conditions that shall include name(s) of qualified entomologist(s) and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched; 3) map(s) showing the location of nests/colonies; and, 4) a description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found. A sufficient description of biological conditions, primarily impacted habitat, shall include native plant composition (e.g., density, cover, and abundance) within 	<p>Prior to vegetation removal and ground-disturbing activities</p>	<p>Project Applicant/Qualified Entomologist</p>

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Mitigation Measure	Timing	Responsible Party
<p>impacted habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species).</p>		
<p>Mitigation Measure #2: Avoidance Plan</p> <p>If Crotch’s bumble bee is detected, the Project applicant in consultation with a qualified entomologist/biologist and CDFW shall develop a plan to fully avoid impacts to Crotch’s bumble bee. The plan shall include effective, specific, enforceable, and feasible measures. An avoidance plan shall be submitted to CDFW prior to implementing Project-related ground-disturbing activities and/or vegetation removal where there may be impacts to Crotch’s bumble bee.</p>	<p>Prior to vegetation removal and ground-disturbing activities</p>	<p>Project Applicant</p>
<p>Mitigation Measure #3: Incidental Take Permit</p> <p>If Crotch’s bumble bee is detected and if impacts to Crotch’s bumble bee cannot be feasibly avoided, the Project applicant shall consult with CDFW and obtain appropriate take authorization from CDFW (pursuant to Fish & G. Code, § 2080 et seq.). The Project applicant shall comply with the mitigation measures detailed in the take authorization issued by CDFW. The Project applicant shall provide a copy of a fully executed take authorization prior to the issuance of a grading permit and before any ground disturbance and vegetation removal.</p>	<p>Prior to issuance of grading permit and ground-disturbing activities</p>	<p>Project Applicant</p>
<p>Mitigation Measure #4: Additional Intermediate Mariposa Lily Surveys -</p> <p>OCWR shall delay Project construction to facilitate completion of IML-focused surveys during the IML growing season. A qualified botanist shall complete multiple IML focused surveys throughout the blooming period, typically May through July, to properly document the number of vegetative and flowering plants.</p>	<p>Prior to issuance of grading permit and ground-</p>	

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Mitigation Measure	Timing	Responsible Party
OCWR shall mitigate through the in-lieu fee system as agreed upon by the Wildlife Agencies.	disturbing activities	