



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Marine Region
1933 Cliff Drive, Suite 9
Santa Barbara, CA 93109
wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



September 19, 2024

Sam Fielding, Coastal Program Analyst
San Francisco Bay Conservation and Development Commission
375 Beale Street, Suite 510
San Francisco, CA 94105
Sam.Fielding@bcdc.ca.gov

Cargill, Incorporated Solar Salt System Maintenance and Operation Activities Project
(Project) Draft Environmental Assessment (DEA) SCH# 2020080442.

Dear Mr. Fielding:

The California Department of Fish and Wildlife (Department) received a DEA from San Francisco Bay Conservation and Development Commission (BCDC) for the Project pursuant 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 the Department, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

DEPARTMENT ROLE

The Department 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).) The Department, 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, the Department 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. The Department is also responsible for marine biodiversity protection under the Marine Life Protection Act in coastal marine waters of California, and ensuring fisheries are sustainably managed under the Marine Life Management Act.

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.

Sam Fielding
San Francisco Bay Conservation and Development Commission
September 19, 2024
Page 2

The Department is also submitting comments as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) The Department expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. CDFW requires a Lake and Streambed Alteration Notification, pursuant to Fish and Game Code section 1600 et. seq., for Project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements.

Likewise, to the extent implementation of the Project 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 is strongly recommended.

PROJECT DESCRIPTION SUMMARY

Proponent: Cargill, Incorporated

Objective: The objectives of the Project include: (1) continue conducting various activities necessary to maintain the integrity and stability of earthen berms, water control structures, and other infrastructure associated with salt-making to ensure continued viability of salt production activities; (2) allow for implementation of preliminary sea level rise adaptation efforts, including studies; and (3) permit Cargill to develop and implement alternative maintenance methods, as discussed herein, that may further reduce the effects of maintenance activities on the environment, improve efficiency, and/or adapt to changing climate conditions, where appropriate.

Location: The Project has three primary locations, Newark Plant 1, Newark Plant 2, and Redwood City Plant, a total of 41 parcels, spread out on the fringes of San Francisco Bay in Alameda and San Mateo Counties. The parcels are generally near the cities of Hayward, Fremont, Redwood City, and Menlo Park. In addition to the Project parcels, the Project also includes a transbay brine pipeline that traverses San Francisco Bay connecting the Redwood City and Newark Plants.

Timeframe: The DEA is covering Project activities for a ten-year period from 2025 through 2034.

MARINE BIOLOGICAL SIGNIFICANCE

The San Francisco Bay-Delta is the second largest estuary in the United States and supports numerous aquatic habitats and biological communities. It encompasses 479

Sam Fielding
San Francisco Bay Conservation and Development Commission
September 19, 2024
Page 3

square miles, including shallow mudflats. This ecologically significant ecosystem supports both state and federally threatened and endangered species and sustains important commercial and recreational fisheries.

STATE AND FEDERALLY LISTED AND COMMERCIAL/RECREATIONALLY IMPORTANT SPECIES

Protected species under the State and Federal Endangered Species Acts that could potentially be present near Project activities include:

- Longfin smelt (*Spirinchus thaleichthys*), state-threatened
- Chinook salmon (*Oncorhynchus tshawytscha*), state and federally threatened (Central Valley Spring-run), state and federally endangered (Sacramento River Winter-run), state species of special concern (Central Valley Late Fall Run, Central Valley Fall Run)
- Steelhead (*Oncorhynchus mykiss*), federally threatened (Central California Coast evolutionary significant units)
- Green sturgeon (*Acipenser medirostris*), federal threatened (Southern Distinct Population Segment)
- White sturgeon (*Acipenser transmontanus*), state candidate threatened
- Western river lamprey (*Lampetra ayresii*), state species of special concern
- Pacific lamprey (*Endosphenus tridentatus*), state species of special concern
- California least tern (*Sternula antillarum browni*), state and federally endangered, state fully protected
- Western snowy plover (*Charadrius nivosus nivosus*), state species of special concern and federal threatened
- California Ridgway's rail (*Rallus obsoletus abeoletus*), state and federally endangered, state fully protected
- California black rail (*Laterallus jamaicensis coturniculus*), state threatened, state fully protected

Several species with important commercial/recreational fisheries value and habitat value for spawning and rearing could potentially be present near Project activities. These include:

- Pacific herring (*Clupea pallasii*)
- Eelgrass (*Zostera marina*)
- Bay Shrimp (*Crangon sp.*)
- California halibut (*Paralichthys californicus*)
- Dungeness crab (*Metacarcinus magister*)

Sam Fielding
San Francisco Bay Conservation and Development Commission
September 19, 2024
Page 4

COMMENTS AND RECOMMENDATIONS

The Department offers the comments and recommendations below to assist BCDC in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

I. Project Level Impacts and Other Considerations

Aquatic Species Entrainment and Impingement from Water Intakes and Dredging

Comment: Unscreened intake of seawater from San Francisco Bay and tributaries can entrain and impinge aquatic species. All intakes drawing seawater should be constructed with the inclusion of a fish screen, consistent with the screen requirements of the resource agencies, to prevent the take of aquatic species, including state and federally listed and special status species. A 2081(b) incidental take permit is required to cover the take of state listed species that is likely occurring from the maximum approximate intake of 42,000 acre feet of water yearly. Additionally, the intake of water from creeks subject to Fish & Game Code section 1600 et seq is not currently covered under a Lake and Streambed Alteration agreement.

Comment: The Department understands that the construction and operation of fish screens on all of the Cargill's seawater intakes will take time to implement. Additionally, the Department is in agreement with value of the proposed monitoring program to determine the risk of entrainment and impingement at all of Cargill's seawater intakes. Given the time to conduct monitoring and construction of multiple intake fish screens, specific compensatory mitigation should be provided to cover the Project's impacts from all seawater intakes. Additionally, seawater intake should only occur during a defined pumping window to reduce the potential risk of entrainment and impingement of aquatic species.

Comment: Mitigation Measure BIO-2: Avoid, Minimize, and Mitigate Impacts Associated with Water Intake is lacking important details to mitigate a potentially significant impact to state and federally listed species. Mitigation Measure BIO-2 does not include a specific pumping window to avoid salmonids and smelt nor discusses the CDFW screening criteria for longfin smelt which is more stringent than National Marine Fisheries Service (NMFS) criteria for protection of salmonids. Additionally, the measure seems to indicate that compensatory mitigation would only be provided prior to implementing fish screens.

Recommendation: The Department recommends Cargill apply for a 2081(b) Incidental Take Permit to receive coverage for the take of state listed species. Additionally, Cargill should notify the Department for a Lake and Streambed

Sam Fielding
San Francisco Bay Conservation and Development Commission
September 19, 2024
Page 5

Alteration Agreement to cover the various in-water Project activities, but specifically for ongoing water pumping subject to Fish & Game Code section 1600 et seq.

Recommendation: The Department recommends that the pumping window for the entire project area be adjusted to June 15 through October 31 to account for longfin smelt migration from spawning locations in South San Francisco Bay.

Recommendation: The Department recommends that Mitigation BIO-2 include the following changes:

- White sturgeon should be added as a species with potential entrainment and impingement risk.
- Fish screen design needs to meet the screen criteria and requirements of the Department (Attachment 1) and U.S. Fish and Wildlife Service, in addition to NMFS.
- Item c should specify that if any unscreened pumping occurs prior to the conclusion, and agency acceptance, of the monitoring plan, compensatory mitigation for all agency authorizations shall be provided to offset potentially significant impacts to state and federally listed and special status species. Additionally, this item should also describe the need for compensatory mitigation for screened intakes following the conclusion of the monitoring study.
- The mitigation measure should include the proposed pumping window. The Department recommends the pumping window be June 15 through October 31 to be consistent across the Project area and account for potential longfin smelt presence in the month of June.
- Diver assisted hydraulic dredging should be included under MM BIO-2 since this could be an intermittent source of seawater intake and aquatic species entrainment and impingement.

Figure 3.4-4. Mitigation Measure BIO-2 Implementation Process Flowchart

Comment: Figure 3.4-4 illustrates the process of events if intakes are screened or unscreened. For example, the flowchart identifies the steps that would be taken to address potential impacts from unscreened intakes such as conducting monitoring and identifying protective fish measures. Although the Department is in agreement with the components of the process, there are two concerns that the chart does not capture. Compensatory mitigation will be a requirement of the Department's CESA authorization of the Project to operate the intakes, whether an individual intake is screened or unscreened. The addition of a screen on an intake is a minimization measure but does not eliminate the potential of take. The flowchart currently only seems to indicate that compensatory mitigation is necessary for unscreened intakes; but it is important to note that compensatory mitigation will likely be necessary for screened intakes as well. Additionally, if the intake is screened, there are still further

Sam Fielding
San Francisco Bay Conservation and Development Commission
September 19, 2024
Page 6

actions that would be required, specifically monitoring and maintenance of the screen, to confirm it continues to operate as intended.

Recommendation: The Department recommends amending Figure 3.4-4: Mitigation Measure BIO-2 Implementation Process Flowchart to describe the process when screened intakes are used. The use of a screened intake will still require continued monitoring to confirm that the screen is operating as intended. Take of listed species could still occur if the screens are not maintained properly. Continued monitoring of the screen, after installation, will be a requirement of the Department's approval of the Project.

Recommendation: The Department recommends that Figure 3.4-4 include compensatory mitigation whether the intake is screened or unscreened.

White Sturgeon

Comment: The white sturgeon is currently under consideration and review for being listed as a state threatened species and is a candidate species under CESA. While the species has candidate status under CESA it is temporarily afforded the same protections as a state listed species. During the white sturgeon listing review period, the species should be considered as threatened and analyzed as such within the DEA.

Recommendation: The Department recommends that white sturgeon be included in all DEA discussion and analysis regarding listed species and should be included in all minimization and mitigation measures intended to avoid and minimize impacts to salmonids, longfin smelt, and green sturgeon.

Western River Lamprey

Comment: The Western river lamprey is a state species of special concern (SSC) and has been identified within the Project area. Although the SSC designation does not have a formal legal status, species are designated to bring additional attention to conservation, research, and recovery of species that have previously been subject to population declines or are generally rare. SSCs should be considered during the environmental review process. CEQA (California Public Resources Code §§ 21000-21177) requires State agencies, local governments, and special districts to evaluate and disclose impacts from projects in the State. Section 15380 of the CEQA Guidelines indicates that species of special concern should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein. Sections 15063 and 15065 of the CEQA Guidelines, which address how an impact is identified as significant, are particularly relevant to SSCs. Project-level impacts to listed (rare, threatened, or endangered species) species are generally considered significant thus requiring lead agencies to prepare an Environmental Impact Report to fully analyze and evaluate the impacts. In assigning

Sam Fielding
San Francisco Bay Conservation and Development Commission
September 19, 2024
Page 7

"impact significance" to populations of non-listed species, analysts usually consider factors such as population-level effects, proportion of the taxon's range affected by a project, regional effects, and impacts to habitat features.

Recommendation: The Department recommends the final EA include analysis of the potential impacts to the Western river lamprey and add the species to the special status species table E-2 in Appendix E.

Mitigation Measure BIO-4

Comment: Mitigation Measure BIO-4 describes compensatory mitigation for unavoidable impacts to protected wetlands. BIO-4 is lacking in detail necessary for the Department to make any determination on whether the future proposed mitigation will be sufficient. Mitigation measures should not be deferred until a later time. BCDC should commit itself to the mitigation by identifying and adopting one or more mitigation measure for the identified significant effect. The mitigation measure must also set out clear performance standards for what the future mitigation must achieve.

Alternatively, BCDC should provide a menu of feasible mitigation options from which Cargill or responsible agency staff can choose in order to achieve the stated performance standards.

Recommendation: The Department recommends amending BIO-4 to outline clear options for wetland mitigation which include specific performance standards for the selected mitigation option or options.

Avoidance and Minimization Measure ES and SNR-8

Comment: Avoidance and minimization measure ES and SNR-8 describes the procedures for Western snowy plover and California least tern nesting surveys, buffers, and tracking. The measure describes the surveys being performed by Cargill or a qualified biologist. CDFW requires that listed or special status species be performed by a qualified biologist with experience studying or surveying each specific species.

Recommendation: The Department recommends that all nesting bird surveys be conducted by a qualified biologist, not Cargill employees. Additionally, all qualified biologists shall be approved by the Department and U.S. Fish and Wildlife Service prior to conducting surveys.

Avoidance and Minimization Measure ES and SNR-12

Comment: Avoidance and minimization measure ES and SNR-12 describes measures to minimize potential impacts to nesting birds. The Department finds the

Sam Fielding
San Francisco Bay Conservation and Development Commission
September 19, 2024
Page 8

measure consistent with Department recommendations except for the time period in which the survey occurs prior to starting a maintenance activity. The 14 day time period before the maintenance activity is not consistent with the Departments recommendations for nesting bird surveys.

Recommendation: The Department recommends nesting bird surveys be conducted no more than 7 days prior to the proposed maintenance activity.

Avoidance and Minimization Measure ES and SNR-15

Comment: Avoidance and minimization measure ES and SNR-15 describes monitoring measures during impact pile driving. The measure should include additional minimization measures to further reduce potential impacts to aquatic species. Additional measures could include, but not be limited to, impact driving only during low tide, hydroacoustic sound monitoring, the use of hydroacoustic attenuation measures such as a wood cushion block or bubble curtain.

Recommendation: The Department recommends Measures ES and SNR-15 be expanded to include additional measures to avoid potential impacts. Alternatively, an additional avoidance and minimization measure could be added to describe potential hydroacoustic attenuation measures.

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://wildlife.ca.gov/Data/CNDDDB/SubmittingData#44524420-pdf-field-survey-form>. 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://wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

FILING FEES

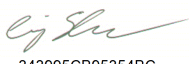
The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by the Department. Payment of the fee is required 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.)

Sam Fielding
San Francisco Bay Conservation and Development Commission
September 19, 2024
Page 9

CONCLUSION

The Department appreciates the opportunity to comment on the DEA to assist BCDC in identifying and mitigating Project impacts on biological resources. Questions regarding this letter or further coordination should be directed Arn Aarreberg, Environmental Scientist, at (707) 791-4195 or R7CEQA@wildlife.ca.gov.

Sincerely,

Signed by:

343995CB95354BC...
Craig Shuman, D. Env
Marine Regional Manager

DocuSigned by:

B77E9A6211EF486...
Erin Chappell
Bay Delta Regional Manager

ATTACHMENTS

1. California Department of Fish and Wildlife Fish Screen Criteria

ec: Claire Waggoner, Environmental Program Manager
Department of Fish and Wildlife

Craig Weightman, Environmental Program Manager
Department of Fish and Wildlife

Eric Wilkins, Senior Environmental Scientist
Department of Fish and Wildlife

Marcia Grefsrud, Senior Environmental Scientist
Department of Fish and Wildlife

Arn Aarreberg, Environmental Scientist
Department of Fish and Wildlife

Brian Wines, Water Resource Control Engineer
San Francisco District Regional Water Quality Control Board

Reyna Amezcua, Regulatory Secretary
San Francisco Bay Conservation and Development Commission

Brian Meux, Fisheries Biologist
National Marine Fisheries Service

Andrew Raabe, Senior Fish and Wildlife Biologist
United States Fish and Wildlife Service

Sam Fielding
San Francisco Bay Conservation and Development Commission
September 19, 2024
Page 10

Habitat Conservation Program Branch CEQA Program Coordinator
California Department of Fish and Wildlife

State Clearinghouse (SCH No. 2020080442)