

3. Environmental Setting, Impacts, and Mitigation Measures

Scope of Analysis

This Draft EIR analyzes the potential effects of the Project on the environment under the applicable environmental resource categories listed in the CEQA Initial Study Checklist (Appendix G of the 2021 CEQA Guidelines).

Each environmental resource area potentially impacted by the Project is addressed in the following sections numbered as follows:

- 3.1 Aesthetics
- 3.2 Air Quality
- 3.3 Biological Resources
- 3.4 Cultural Resources
- 3.5 Energy
- 3.6 Geology and Soils
- 3.7 Greenhouse Gas Emissions
- 3.8 Hazards and Hazardous Materials
- 3.9 Hydrology and Water Quality
- 3.10 Noise
- 3.11 Population and Housing
- 3.12 Transportation
- 3.13 Utilities and Service Systems
- 3.14 Wildfire

Each section of Chapter 3 contains the following elements:

Study Area

This subsection identifies the study area used to describe the environmental setting and to complete the impact analysis (i.e., the geographic scope of the analysis used to consider direct and indirect impacts). In some instances, the study area has the same footprint as the Project construction footprint, or Project Site. In other cases, a buffer has been applied to the Project construction footprint (e.g., Biological Resources) to support assessment of potential off-site or regional (e.g., Air Quality) impacts.

Setting

This subsection presents a description of the existing physical environmental conditions within the study area for the specific resource area evaluated (see above). The setting describes existing conditions at an appropriate level of detail to understand the impact analysis and provides a baseline by which to compare the potential impacts of the proposed Project.

Regulatory Framework

This subsection provides a brief discussion of applicable federal, state, and local regulations and policies that are relevant to the resource category, inclusive of regulations and policies that apply to the Coastal Zone.

Evaluation Criteria and Significance Thresholds

This subsection provides the significance thresholds for evaluation of environmental impacts. The significance thresholds are based on the 2021 CEQA Guidelines Appendix G. Environmental Checklist and applicable regulatory standards.

Methodology

The methodology subsection discusses the approach to the impact analysis.

Impacts and Mitigation Measures

This subsection evaluates the potential for the Project to significantly affect the physical environment described in the setting. Potential impacts are identified and characterized, and where feasible, mitigation measures are identified to avoid or reduce significant impacts to a less-than-significant level.

Impacts

As described above, significance thresholds for each environmental resource category are presented in each section of Chapter 3. For the impact analyses, the following categories are used to identify impact significance:

No Impact. This determination is made if a resource is absent or if a resource exists within the Project area, but there is no potential that the Project could affect the resource.

Less-than-Significant Impact. This determination applies if there is a potential for some limited impact on a resource, but the impact is not significant under the significance threshold.

Less-than-Significant Impact after Mitigation Incorporated. This determination applies if there is the potential for a substantial adverse effect in accordance with the significance threshold, but mitigation is available to reduce the impact to a less-than-significant level.

Significant and Unavoidable Impact. This determination applies to impacts that are significant, even after mitigation has been included to reduce the impact. Under this determination, no additional feasible mitigation is available to reduce the impact to a less-than-significant level.

Mitigation Measures

Environmental impacts are numbered in this Draft EIR using the section number followed by sequentially numbered impacts. Mitigation measures are numbered to correspond to the impact numbers; for example, Mitigation Measure AES-1 would address Aesthetics Impact AES-1. Where more than one mitigation measure is included to mitigate one impact the sequence of “a,” “b,” etc. is added (for example: Mitigation Measure AES-1a and Mitigation Measure AES-1b would both apply to Impact AES-1).

Cumulative Impacts

Cumulative impacts are defined as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines Section 15355). Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time.

Cumulative impacts are discussed in each environmental resource section following the description of the Project-level impacts and mitigation measures. The cumulative impact analysis is based on the same setting, regulatory framework, and significance thresholds presented in each resource category section. Additional mitigation measures are identified if the analysis determines that the Project's contribution to an adverse cumulative impact would be cumulatively considerable and, therefore, significant.

Approach to Cumulative Impact Analysis

Two approaches to cumulative impact analysis are discussed in CEQA Guidelines Section 15130(b). The first approach is a list of past, present, and probable future projects producing related or cumulative impacts. The second approach is a summary of projections contained in an adopted local, regional or state-wide plan, such as a general plan or related planning document, or in an adopted or certified environmental document, which describes or evaluates conditions contributing to cumulative effects.

For this Draft EIR, the cumulative impact analysis utilizes the list approach. In addition, the analysis of cumulative impacts uses relevant planning documents, where they provide an appropriate evaluation. Table 3-1 lists relevant projects used in the cumulative impacts analysis for each environmental resource topic.

List of Relevant Projects

Table 3-1 provides a list of past, present, and reasonably foreseeable future projects within and near the Project Area, including a brief description of the projects and their anticipated construction schedules (if known). Single-family homes and other similar small-scale uses were not included because of their negligible cumulative effects.

Efforts to identify cumulative projects included outreach to the Humboldt County Planning Department, Humboldt County Department of Public Works, the California Coastal Commission, and the Harbor District.

The Humboldt County Department of Public Works reported no known projects to be considered under cumulative effects with proximity to the proposed Project.

Four California Coastal Development Permits for Humboldt Bay water intakes were reviewed and included in Table 3-1. Of the four permits for existing water intakes on Humboldt Bay, the CCC concluded withdrawal of water from Humboldt Bay sustained, and did not impact, biological productivity in Humboldt Bay (CCC 2014, CCC 2013, CCC 2012). For the largest withdrawal permitted to Coastal Seafoods, the CCC found funding the treatment of one acre of Spartina would be required to offset potential losses to biological productivity in Humboldt Bay (CCC 2016).

Projects reported by the Humboldt County Planning Department and the Harbor District are summarized in Table 3-1. Projects Considered for Cumulative Impacts and considered in the cumulative impact analysis in each resource section.

Existing National Pollutant Discharge Elimination System (NPDES) permitted users of the RMT II Outfall, as administered by the North Coast Regional Water Quality Control Board, also considered for cumulative impact analysis include:

- DG Fairhaven Power, LLC (Order No. R1-2018-0013); and
- Peninsula Community Services District and Samoa Pacific Group Town of Samoa Wastewater Treatment Facility (Order No. R1-2020-0005).

Table 3-1 Projects Considered for Cumulative Impacts

Project Name	Project Description	Estimated Construction Schedule	Project Location
Harbor District Mariculture Development Program	Various Harbor District-led projects to support commercial fisheries. See below for detailed project list.	Ongoing	Various
NPDES permit for DG Fairhaven Power, LLC (Order No. R1-2018-0013)	Existing permitted discharge of 0.350 MGD of 40 MGD capacity via the RMT II ocean outfall	The plant is currently offline and may again be operational and discharging in early 2022. No additional construction would be required	Samoa, CA. Discharge occurs in the same location as the planned discharge from the Project.
NPDES permit for Peninsula Community Services District and Samoa Pacific Group Town of Samoa Wastewater Treatment Facility (Order No. R1-2020-0005)	Future permitted discharge of 0.0756 MGD of 40 MGD capacity via the RMT II ocean outfall	Discharge would be active after the construction of the Peninsula Community Services District Wastewater Treatment Facility	Samoa, CA. Future discharge would occur in the same location as the planned discharge from the Project
Peninsula Community Services District Samoa Peninsula Wastewater Treatment Facility	Construction would be needed to expand wastewater treatment operations from Samoa and Fairhaven, CA. After treatment, effluent would be discharged via the NPDES permit (see above) via the RMT II ocean outfall	Small levels of discharge have commenced and would increase following future expansion of the wastewater treatment facility, pending future state and federal funding	The collection system would extend throughout Fairhaven and Samoa, CA. The treatment facility would be located in Samoa, CA.
Fiber optic off-shore cable landing project	An off-shore fiber optic cable would cross the sea floor and land in or near Samoa, CA then travel to a data center in Arcata	Ongoing	Parallel to State Route 255 in Samoa and Manila, CA
Samoa Town Improvements	A Coastal Development Permit has been issued by Humboldt County for components of the Samoa Town Master Plan, including demolition of buildings, remodeling the Cookhouse, constructing a campground and cabins, upgrades to the maritime museum, and other improvements	Construction would occur in 2021	Samoa, CA, approximately one mile north of the Project Site
Manila Shared Use Pathway Project along Highway 255	Paved shared-use pathway adjacent to Highway 255 in Manila extending approximately one mile. See below for more detail.	Construction would occur in 2022	Manila, CA approximately two miles north of the Project Site.
Speculative future off-shore wind projects.	Future off-shore wind projects may require land-based infrastructure in or near Samoa, CA	Unknown	Unknown
Renewable Energy Port	Future large-scale wind energy support facility proposed by the Humboldt District	Unknown	Redwood Marine Terminal I (RMT I) and adjacent privately held properties zoned Coastal Dependent Industrial

Project Name	Project Description	Estimated Construction Schedule	Project Location
Multipurpose Dock Replacement Project	Construction of modern port facilities at RMT I, including maintenance dredging, construction of a new heavy lift terminal, and anticipated impacts to wetlands and eelgrass	Unknown	RMT I and adjacent privately held properties zoned Coastal Dependent Industrial
Humboldt Bay Spartina Removal Projects	Various Spartina removal projects occurring under certified Final Programmatic Environmental Impact Report for the Humboldt Bay Regional Spartina Eradication Plan (SCH# 2011012015) and Coastal Development Permit #9-16-0033.	Ongoing	Various locations surrounding Humboldt Bay
Hog Island Water Intake	Humboldt Bay screened water intake at 0.33 feet per second, mesh openings of no more than 3/32 inches, and 75,000 gallons of water per day. Authored under California Coastal Commission (CCC) Coastal Development Permit (CDP) 9-13-0500.	Existing	Samoa Peninsula south of the proposed Project
Hagfish Water Intake	Humboldt Bay screened water intake of 0.051 cubic feet per second (cfs). CCC CDP 1-13-0224.	Existing	Foot of C Street in Fields Landing
Coast Seafoods Water Intake	Humboldt Bay screened water intake up to 1 million gallons of water per day.	Existing	Samoa Peninsula south of the proposed Project
Taylor Water Intake	Humboldt Bay water intake of 0.33 cfs with screened mesh openings of no more than 3/32 inches. CCC CDP E-11-029.	Existing	Redwood Marine Terminal II Dock (co-located with the proposed Project)
Pacific Flake	Infrequent (e.g., monthly) withdrawal of 1,500 gallons of water from Humboldt Bay.	Existing	Adjacent to the proposed Terrestrial Development Project Site
North Wind Management Llc Co.	Indoor commercial cannabis cultivation, off-site processing, distribution, infusion, non-volatile manufacturing, and volatile manufacturing.	Following approval of permits. Application was filed with the County of Humboldt on September 19, 2021.	On the parcel to the north of and adjacent to the proposed Terrestrial Development Project Site, APN 401-112-030-000

References

California Coastal Commission (CCC). 2016. Staff Report: Regular Calendar Application No. 9-16-0033 Coast Seafoods Company.

California Coastal Commission (CCC). 2014. Administrative Permit Application No. 1-13-0224 Hag Fish Corporation.

California Coastal Commission (CCC). 2013. Staff Report: Regular Calendar, Application No. 9-13-0500 Hog Island Oyster Company.

California Coastal Commission (CCC). 2012. Addendum to Staff Report for CDP Application E-11-029, Taylor Mariculture LLC and Staff Report: Regular Calendar, Application No. E-11-029.