3.13 Utilities and Service Systems

3.13.1 Study Area

For water service, the Study Area is the service area of the Humboldt Municipal Water District. For wastewater, the Study Area is the existing leach field on-site and the proposed PCSD force main. For stormwater, the Study Area is confined to the Project Site. For electricity, the Study Area is the PG&E distribution grid the Project Site is located on. The Study Area for the solid waste facilities spans the region that contributes to the local waste stream.

3.13.2 Setting

The industrial areas of the Samoa Peninsula, and specifically the Project Site, are well served by utilities because of the long history of high intensity industrial uses. The following subsections describe the existing utilities individually.

Water

The Humboldt Bay Municipal Water District (HBMWD) provides industrial untreated and potable water services to the Samoa Peninsula. HBMWD maintains two separate pipeline systems delivering treated drinking water (potable) and untreated raw (non-potable) industrial water to its customers in the area. HBMWD maintains a Capital Improvement Plan (CIP) to ensure that facilities and infrastructure are maintained and improved over time. These efforts have included projects on the Samoa Peninsula. The domestic system is served by a 12-inch diameter, concrete-lined transmission pipe that is routed down the peninsula, and then looped though a 27-inch diameter, steel pipeline under Humboldt Bay. The source of the industrial and potable water is the Mad River.

HBMWD supplies industrial water to some industrial properties on the peninsula, including currently supplying fire water to the proposed Project Site and other neighboring Harbor District properties. A one million-gallon (1-MG) industrial water storage tank, owned and operated by HBMWD, is located southwest of the Project Site, approximately 600 feet west of the Project Site between Vance Avenue and New Navy Base Road. The raw water transmission line is a 42-inch diameter, concrete-lined corrugated pipeline that ends approximately due east of the DG Fairhaven power plant. Lateral from the main water transmission line already exist on to the Project Site. Historically, this line served pulp mills on the peninsula; however, the vast majority of the industrial demand has since subsided leaving substantial capacity in the system available for use.

Wastewater (Sanitary Sewer)

The only central sewer treatment system on the Samoa Peninsula is within the town of Samoa. There are two original systems serving the existing houses, generally referred to as System A and System B. System A provides sewer collection, transport, treatment (redwood bark filters), and disposal (percolation pond) to the majority of the houses and buildings. System B provides sewer collection, transport, treatment, and disposal to approximately 25 homes and the Women's Club located along Sunset Avenue. The third system was recently installed to serve the new low-income housing development in the Town of Samoa, the Danco Development. This third treatment unit connects into System A's disposal system. Currently, the Peninsula Community Services District owns, operates, and maintains all three of the existing wastewater systems, which includes three large holding tanks, conveyance piping, pumping, a large holding reservoir/pond, disposal percolation basin, and the third treatment unit.

The Project Site and all residential and commercial/business properties within the communities of Fairhaven and Finntown are served through onsite, individual septic tank and leach field systems that are each property owner's responsibility. The NCRWQCB has indicated that physical conditions that exist on the peninsula (high groundwater, coarse sandy soils, and small residential lots) make it infeasible for septic system discharges to meet water quality objectives set forth in the Water Quality Control Plan for the North Coast Region. Active industrial properties are served by onsite leach fields, which is the case for the Project Site. Future expansion of the treatment systems is

planned to provide wastewater treatment and disposal to all properties on the Samoa Peninsula consistent with the Humboldt Bay Area Plan.

Sanitary sewer service is not currently provided to the Project Site. An existing leach field is located at the southern portion of the Project Site is currently utilized by the RMT II and ancillary facilities occupying the Project Site. The leach field was designed and approved to handle a flow of 14,700 gpd of domestic wastewater generated by the employees of the pulp mill while in operation. The leach field was designed and constructed as two separate but adjacent units. Each of the two leach field units has a distribution box and 17 4-Inch diameter, 90-foot long, perforated pipe leach lines, spaced at 10 feet on center. In 2014 the Harbor District proposed and received approval to separate the two units with one designated to receive domestic wastewater and the other receiving process wash water from RMT II operations.

The existing leach field would be used by the Project temporarily during construction and operation of Phase 1. The leach field use would be discontinued once construction begins on Phase 2 production modules, as the second production module building is proposed to be located over the existing leach field. Before the Phase 2 production modules are under construction, the Project Site structures would be connected to the Peninsula Community Services District (PCSD) sewer line that would be constructed west of the Project Site in the Vance Ave utility corridor.

Stormwater

The peninsula is made up of typically well-drained soils (coarse sands) and topographic features that do not typically require addressing runoff issues. No formal stormwater systems, other than privately owned drainage ditches, storm drain catch basins, and underground piping are located on some of the developed industrial properties.. The Project Site is generally flat, with a gentle sloping from west to east. Stormwater generated on the western side of the site currently drains to an existing pipe system that discharges to the ocean outfall. The stormwater generated on the eastern side of the site currently discharges to Humboldt Bay. The break point between the two drainages areas and interconnection between the two drainage systems is not well understood. The stormwater system on the Project Site would be significantly upgraded to meet applicable stormwater requirements and contain on-site all stormwater resulting from an event up to the 100-year event.

Solid Waste

Solid waste and recyclables pickup within the Samoa Peninsula is collected by Recology, which also has a recycling plant on the Samoa Peninsula. The County, through Humboldt Waste Management Authority (HWMA), has been trucking its solid waste approximately 175 miles to two out-of-county landfills. One third of this waste is shipped to Dry Creek Landfill near Medford, Oregon under a long-term contract. The remaining two thirds of solid waste is hauled to the Anderson landfill located near Redding, California. Dry Creek Landfill's projected operational life exceeds 100 years under any scenario. The Anderson Landfill is located at 18703 Cambridge Road in Anderson, California. The landowner is Waste Management of California, Inc a subsidiary of Waste Management, Inc. The landfill's maximum permitted throughput is 1,850 tons per day. The remaining capacity is 11,914,025 cubic yards. The estimated closure date is 2055. Together, these two landfills would allow Humboldt County to meet its landfill disposal needs over the next 20 years.

Energy

Electricity is provided to the Samoa Peninsula by the Pacific Gas and Electric Company (PG&E). Power is transmitted to the Project Site through 115 kilovolt (kV) lines from the source to the PG&E substation located in Fairhaven. The power is then converted to be suitable for distribution via 12 kV overhead lines. Electricity is distributed via private lines, and each structure has its own meter.

PG&E also provides natural gas to commercial users on the Samoa Peninsula through a pipeline under Humboldt Bay that begins near 14th Street in Eureka and ends south of Samoa near Bay Street. PG&E currently has a 4-inch steel natural gas service line located adjacent to the electrical substation at the Project Site. The gas line is not currently being utilized.

3.13.3 Regulatory Framework

Federal

There are no federal regulations governing utilities that apply to the Project.

State

California Integrated Waste Management Act

The California Integrated Waste Management Act (CIWMA), also known as Assembly Bill 939, required each jurisdiction in the state to divert 50 percent of its solid waste from landfill or transformation facilities by 2000, and established a statewide diversion of 75% by 2020 for all municipal solid waste. The CIWMA also required each County to prepare a Countywide Integrated Waste Management Plan (CoIWMP), which is the main planning document for solid waste management in each County. Humboldt County's CoIWMP is the principal planning document for solid waste management in the county, addressing source reduction, household hazardous waste, and countywide landfill capacity needs.

Local

Humboldt Bay Area Plan

The Humboldt Bay Area Plan contains requirements related to the siting of regional electrical transmission lines and the installation of oil and natural gas pipelines. However, these requirements do not pertain to the development of individual sites like the proposed Project.

3.13.4 Evaluation Criteria and Thresholds of Significance

Evaluation Criteria	Significance Thresholds	Sources
Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	Project would require relocation or construction of public infrastructure which would have significant environmental effect	CEQA Guidelines Appendix G, Checklist Item XIX (a)
Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?	Inadequate water supply capacity to serve the needs of the Project	CEQA Guidelines Appendix G, Checklist Item XIX (b)
Would the Project result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	Inadequate sewer capacity to serve the Project	CEQA Guidelines Appendix G, Checklist Item XIX (c)
Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Inadequate regional landfill capacity or waste management to serve the Project	CEQA Guidelines Appendix G, Checklist Item XIX (d)
Would the Project comply with federal, state and local management and reduction statutes and regulations related to solid waste?	Non-compliance with applicable solid waste diversion regulations	CEQA Guidelines Appendix G, Checklist Item XIX (e)

3.13.5 Methodology

Potential impacts on utilities are analyzed based on the potential for the proposed Project to affect the wastewater, water, stormwater, and solid waste facilities during construction or operation, as indicated in the thresholds above.

3.13.6 Impacts and Mitigation Measures

Impact UTL-a: **Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? (Less than Significant)**

Terrestrial Development

Water

The Terrestrial Development component would use water from three sources. The aquaculture aspect would use a combination of sea water drawn from the Humboldt Bay (~10 MGD), industrial untreated (non-potable) water from the Mad River (~2 MGD), and domestic (potable) water (~0.5 MGD). The water needs of employees and fish processing would be met with potable water. Fire suppression needs, including both fire sprinklers and fire hydrants, would be met with industrial (non-potable) water via the 1 MG HBMWD tank and the onsite 2 MG tank. All treated and untreated freshwater would be supplied by the HBMWD. As discussed in Chapter 3.9 - Hydrology and Water Quality, a will-serve letter was provided by the HBMWD on August 14, 2021, confirming the District has sufficient water to provide domestic water in the amount of 502,000 gallons per day and industrial non-potable water of 2 million gallons per day to the Terrestrial Development Site. According to the Urban Water Management Plan (HBMWD 2020), the District has estimated that demand up to 36 million gallons per day can be met reliably, even if the unprecedented conditions of continuous hydrology similar to the 1976-1977 drought occurred.

The seawater drawn from Humboldt Bay would be supplied by the Harbor District via the sea chest water intakes (discussed below), consisting of a screened marine intake and pumping infrastructure. Water-related utilities would not need to be relocated or expanded as a result of the Terrestrial Development component. A less than significant impact would result.

Wastewater

The sanitary sewer needs of the Terrestrial Development component would be discharged to the existing on-site leach field during operation of Phase 1 of the Project and to the Samoa Wastewater Treatment Plant (WWTP) when the second phase of the Project is operational. The capacity of the leach field has a total capacity of 7,350 gallons per day. Current pre-Project usage is estimated to be between 363 gallons per day to 570 gallons per day based on existing usage at the Project Site related to other existing businesses. It is estimated that the 150 employees of the proposed facility will generate less than 900 gallons per day, leaving a minimum excess capacity in the domestic wastewater leach field of 5,880 gallons per day. Therefore, the wastewater utility requirements for the Project are within the existing capacity of the existing leach field system. Wastewater utilities would not need to be relocated or expanded as a result of the Terrestrial Development component. A less than significant impact would result.

Stormwater Drainage

Stormwater drainage on the Terrestrial Development Site would be significantly upgraded to meet applicable standards for stormwater, as detailed in Appendix H. Stormwater from all events up to a 100-year event would be contained on the Project Site without discharge to Humboldt Bay. The Terrestrial Development component's stormwater system would not impact any other public stormwater drainage facilities or other public resources in the vicinity. A less than significant impact would result.

Power

The Terrestrial Development component includes the modernization and upgrading of the existing substation located on the Terrestrial Development Site. The upgrade would expand the total capacity of the switchyard to from 20 MW to 35 MW to be utilized by the Project and adjacent Harbor District tenants. Connections to the new buildings would be made from the existing electrical switchyard located at the northwest portion of the site. Electrical utilities would be extended to the new buildings within multiple trenches or above-ground transmission lines. The Terrestrial Development component also includes the construction of a rooftop solar array that would be used to generate additional on-site power and to provide an additional power source in the event of an emergency power outage.

The proposed upgrades would not necessitate an expansion of the regional network of transmissions facilities on the Samoa Peninsula and can therefore be considered within the existing capacity of the service provider (PG&E). No electrical utilities would need to be relocated or expanded as a result of the Terrestrial Development component. A less than significant impact would result.

Natural Gas

The existing 4-inch steel natural gas line that serves the Terrestrial Development Site is not currently being utilized. The Terrestrial Development facility will tie into this line to supply natural gas turbine generators that will serve as the backup power supply in the event of a power outage. The backup power system will be able to generate approximately 20 MW of electricity to operate critical fish health and wastewater equipment and infrastructure. Natural gas utility requirements for the proposed facility are within the existing capacity of service providers. Natural gas utilities would not need to be relocated or expanded as a result of the Terrestrial Development component of the Project. No impact would result.

Telecommunications

Telecommunications would be provided to the Terrestrial Development Site via existing AT&T or Suddenlink infrastructure located near the Project Site. Telecommunications utility requirements for the proposed facility are within the existing capacity of service providers. Telecommunication utilities would not need to be relocated or expanded as a result of the Terrestrial Development component. No impact would result.

Mitigation Measures: No mitigation is necessary

Level of Significance: Less than Significant

Ocean Discharge

The Ocean Discharge component of the Project is already constructed and would be used to discharge water from the Terrestrial Development component of the Project. No water, wastewater, stormwater, power, natural gas, or telecommunication utilities would be required to operate the Ocean Discharge component. Therefore, existing utility facilities and entitlements would be sufficient to serve the Ocean Discharge component. No impact would occur.

Mitigation Measures: No mitigation is necessary

Level of Significance: No Impact

Humboldt Bay Water Intakes

The Humboldt Bay Water Intakes component would utilize pumps during operation that would require power to operate. As stated above, the existing substation located near the Terrestrial Development Site would be modernized and upgraded. The upgrade would expand the total capacity of the switchyard to 35 MW to be utilized by the Project and adjacent Harbor District Tenants. The Terrestrial Development component also includes the construction of a rooftop solar array that would be used to generate additional on-site power. With these upgrades and expansion of infrastructure, the pumps would have access to redundant power and backup power systems during the operational phase. Other power utilities would not need to be relocated or expanded. No other utilities would be required during

operation. Therefore, existing utility facilities and entitlements would be sufficient to serve the intakes component. A less than significant impact would occur.

Mitigation Measures: No mitigation is necessary

Level of Significance: Less than Significant

Compensatory Off-Site Restoration

Once implemented, the Compensatory Off-Site Restoration component would not require any utility connections. This component would seek to improve existing habitat. No water, wastewater, stormwater, power, natural gas, or telecommunication utilities would be required to operate the Compensatory Off-Site Restoration component. Therefore, existing utility facilities and entitlements would be sufficient to serve the Compensatory Off-Site Restoration component. No impact would occur.

Mitigation Measures: No mitigation is necessary

Level of Significance: No Impact

Impact UTL-b: Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years? (Less than Significant)

Terrestrial Development

The water used in the operation of the Terrestrial Development component would come from Humboldt Bay (via the Harbor District sea chest) and the Mad River (via the HBMWD). HBMWD has a reliable support of water, even during drought years and has historically had an excess of available water. As explained in Section 2.2.4 Project Operations of the Project Description, the aquaculture operation can operate on freshwater, saltwater, or mixture of the two. This ability reduces risks associated with water insecurity in times of emergency. It is not anticipated that the project would utilize more than 2.5 MGD of freshwater out of the Mad River being supplied by HBMWD. It was estimated that the Project's peak domestic (potable) water demand would be 502,000 gallons per day with normal daily demand less than 200,000 gallons per day. In addition to domestic water, it was determined that approximately 2 MGD of industrial (non-potable) water would be required. The HBMWD is designed to deliver a maximum capacity of 75 MGD and consistently delivered 65 MGD while the two former pulp mills were operational (now closed). It is estimated that the required industrial water would be 3.1% of the amount demanded by the pulp mills (HBWMD 2021b). The HBMWD provided a will serve letter on August 14, 2021, stating that the HBMWD has more than sufficient capacity of domestic (potable) and industrial (non-potable) water to serve the proposed Project even if the unprecedented condition of continuous hydrology similar to the 1976-77 drought occurred (HBMWD 2021b). Therefore, it is not anticipated that the water demands of the Project would not jeopardize the ability of HBMWD to meet water needs of other customers, as described in Section 3.9 – Hydrology and Water Quality. A less than significant impact would result.

Mitigation Measures: No mitigation is necessary

Level of Significance: Less than Significant

Ocean Discharge

The Ocean Discharge component of the Project would facilitate the discharge of water used in the aquaculture operation. No potable water would be used during operation of this component. Therefore, water supplies would not be affected and no impact would occur.

Mitigation Measures: No mitigation is necessary

Level of Significance: No Impact

Humboldt Bay Water Intakes

The Humboldt Bay Water Intakes component would not require any potable water during operation of the Project. Therefore, water supply would not be affected and no impact would occur.

Mitigation Measures: No mitigation is necessary

Level of Significance: No Impact

Compensatory Off-Site Restoration

The Compensatory Off-Site Restoration component would not require any potable water during operation. Therefore, water supply would not be affected and no impact would occur.

Mitigation Measures: No mitigation is necessary

Level of Significance: No Impact

Impact UTL-c: Would the Project result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments? (No Impact)

Terrestrial Development

During Phase 1 of the Project, the capacity of the existing leach field would have a total capacity of 7,350 gallons per day. It is estimated that the 150 employees of the proposed facility will generate less than 900 gallons per day of domestic wastewater, leaving a minimum excess capacity in the domestic wastewater leach field of 5,880 gallons per day. During Phase 2 of the Project, the planned Samoa Peninsula Wastewater Treatment Facility would have capacity to meet operational sanitary sewer needs. No impact would occur.

Mitigation Measures: No mitigation is necessary

Level of Significance: Less than Significant

Ocean Discharge

No wastewater would be generated by the Ocean Discharge component of the Project. Therefore the capacity of the leach field and the planned Samoa Peninsula Wastewater Treatment Facility would not be affected. No impact would occur.

Mitigation Measures: No mitigation is necessary

Level of Significance: No Impact

Humboldt Bay Water Intakes

No wastewater would be generated by the Humboldt Bay Water Intakes component of the Project. Therefore, the capacity of the leach field and the planned Samoa Peninsula Wastewater Treatment facility would not be affected. No impact would occur.

Compensatory Off-Site Restoration

No wastewater would be generated by the Compensatory Off-Site Restoration component of the Project. Therefore, the capacity of the leach field and the planned Samoa Peninsula Wastewater Treatment facility would not be affected. No impact would occur.

Mitigation Measures: No mitigation is necessary

Level of Significance: No Impact

Mitigation Measures: No mitigation is necessary

Level of Significance: No Impact

Impact UTL-d: Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? (Less than Significant)

Terrestrial Development

Construction of the Terrestrial Development component of the Project would result in a temporary increase in solid waste disposal needs associated with demolition and construction wastes. To the greatest extent possible, construction materials existing on-site would be recycled and repurposed, which would significantly reduce the volume of construction waste. Excavated soils and materials resulting from the demolition of existing concrete structures will be reused onsite to the maximum extent possible. Steel will be recycled offsite. Construction waste with no practical reuse or that cannot be salvaged or recycled would be legally disposed of at a local transfer station or shipped directly to an appropriate permitted landfill. Active permitted in-County transfer stations include the Humboldt Waste Management Authority facilities in Eureka or Samoa, California and the Recology Eel River Transfer Station in Fortuna, California. There are no permitted active landfills in the County. Solid waste generated by the Terrestrial Development component would represent a small fraction of the daily permitted tonnage of these facilities. This would be a less than significant impact on landfill capacity with the implementation of federal, state, and local statutes and regulations related to solid waste. Therefore, the Terrestrial Development construction-related solid waste disposal needs would be sufficiently accommodated by existing landfills, and the impact would be less than significant.

Following construction, operation of the Terrestrial Development component would generate solid waste from the aquaculture operation and incidental trash from staff. The aquaculture process results in the creation of the following byproducts: dewatered sludge (feces and feed), processing coproducts (fish heads, guts, etc.), and dead fish (fish ensilage). The sludge is generated as a byproduct of the wastewater treatment process. The sludge is collected and stored in sealed tanks for regular out-shipment after which it would be recycled for other uses such as fertilizer, biogas, etc. The processing coproducts are sorted and stored in chilled sealed containers, maintained as food grade products, and shipped an ongoing basis from the facility by truck. It is estimated that the facility would produce between 8,000 to 12,000 metric tons of processing byproduct annually when fully operational. Fish ensilage are ground on-site and stored in an acid solution prior to being shipped off-site. Aquaculture byproducts present secondary use opportunities (e.g. soil amendment, cosmetic products) and would thus be unlikely to end up in the waste disposal stream. Recology (2020) provided a capacity to serve letter for the Project, “confirming Recology Ostrom Organics’ ability to accept the anticipated volumes of Nordic Aquafarms’ organic byproducts.” At full buildout, Recology will be capable of accepting 2,000 tons per day of organic materials, allowing adequate capacity for Nordic Aquafarms’ organic byproduct to be received by their facilities. A less than significant operational impact would occur.

Mitigation Measures: No mitigation is necessary

Level of Significance: Less than Significant

Ocean Discharge

The Ocean Discharge component of the Project already exists and therefore would not require any construction that would generate solid waste. During the operational phase, the Ocean Discharge component would discharge the treated water generated at the Terrestrial Development Site. No solid waste would be generated during the operational phase. Therefore, the Ocean Discharge component would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. No impact would occur.

Mitigation Measures: No mitigation is necessary

Level of Significance: No Impact

Humboldt Bay Water Intakes

Construction of the Humboldt Bay Water Intakes component of the Project would result in a temporary increase in solid waste disposal needs associated with construction wastes. To the greatest extent possible, materials existing on-site would be recycled and repurposed, which would significantly reduce the volume of construction waste. Excavated soils and materials resulting from trenching and upgrading of the existing piping would be used as backfill to the maximum extent possible. Construction waste with no practical reuse or that cannot be salvaged or recycled would be legally disposed of at a local transfer station. Active permitted in-County transfer stations include the Humboldt Waste Management Authority facilities in Eureka or Samoa, California and the Recology Eel River Transfer Station in Fortuna, California. Solid waste generated by the Humboldt Bay Water Intakes component would represent a small fraction of the daily permitted tonnage of these facilities. This would be a less than significant impact on landfill capacity with the implementation of federal, state, and local statutes and regulations related to solid waste. Therefore, the Humboldt Bay Water Intakes component construction-related solid waste disposal needs would be sufficiently accommodated by existing landfills, and the impact would be less than significant.

During operation, this component would not generate any waste. Therefore, it would not require any capacity at the local landfill or transfer station and would not impair the attainment of solid waste reduction goals. No operational impact would occur.

Mitigation Measures: No mitigation is necessary

Level of Significance: Less than Significant

Compensatory Off-Site Restoration

Implementation of the Compensatory Off-Site Restoration component would result in a temporary increase in solid waste disposal needs associated with the disposal of the creosote piles. The waste would be legally disposed of at local transfer station and then routed to the Anderson Landfill in accordance with all local, state, and Federal laws and regulations. Active permitted in-County transfer stations include the Humboldt Waste Management Authority facilities in Eureka or Samoa, California and the Recology Eel River Transfer Station in Fortuna, California. Solid waste generated by the restoration component would represent a small fraction of the daily permitted tonnage of these facilities. This would be a less than significant impact on landfill capacity with the implementation of federal, state, and local statutes and regulations related to solid waste. Therefore, the Compensatory Off-Site Restoration component solid waste disposal needs would be sufficiently accommodated by existing landfills, and the impact would be less than significant.

During operation, this component would not generate any waste. Therefore, it would not require any capacity at the local transfer station or out of county disposal and would not impair the attainment of solid waste reduction goals. No operational impact would occur.

Mitigation Measures: No mitigation is necessary

Level of Significance: Less than Significant

Impact UTL-e: Would the Project comply with federal, state, and local management and reduction statutes and regulation related to solid waste? (No Impact)

Terrestrial Development

No applicable federal solid waste regulations would apply to the Terrestrial Development component. At the State level, the Integrated Waste Management Act mandates a reduction of waste being disposed and establishes an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. The Terrestrial Development component would not conflict with or impede implementation of such programs. Following construction, operation of the Terrestrial Development component would not generate solid waste in excess of the capacity of local transfer stations. Therefore, no constructional or operational impact would occur.

Mitigation Measures: No mitigation is necessary

Level of Significance: No Impact

Ocean Discharge

The Ocean Discharge component of the Project would discharge the treated water from the Terrestrial Development component. No solid waste would be generated and therefore, the Ocean Discharge component would not conflict with or impeded any federal, state, or local management and reduction statutes or regulations related to solid waste. No impact would occur.

Mitigation Measures: No mitigation is necessary

Level of Significance: No Impact

Humboldt Bay Water Intakes

No applicable federal solid waste regulations would apply to the Humboldt Bay Water Intakes component. At the State level, the Integrated Waste Management Act mandates a reduction of waste being disposed and establishes an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. The Humboldt Bay Water Intakes component would not conflict with or impede implementation of such programs. Following construction, operation of the Humboldt Bay Water Intakes component would not generate solid waste. Therefore, no constructional or operational impact would occur.

Mitigation Measures: No mitigation is necessary.

Level of Significance: No Impact

Compensatory Off-Site Restoration

No applicable federal solid waste regulations would apply to the Compensatory Off-Site Restoration component. At the State level, the Integrated Waste Management Act mandates a reduction of waste being disposed and establishes an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. The Compensatory Off-Site Restoration component would not conflict with or impede implementation of such programs. Following construction, operation of this component would not generate solid waste. Therefore, no constructional or operational impact would occur.

Mitigation Measures: No mitigation is necessary.

Level of Significance: No Impact

3.13.7 Cumulative Impacts

Impact UTL-C-1: Would the Project contribute to a cumulatively significant impact to utilities and service systems? (Less than Significant)

As summarized above, the Project would not result in an impact or a need to expand utilities or service systems, including water, wastewater, electrical power, or telecommunications. Electric power upgrades to the existing system and installation of solar power would ensure the Project can operate without new or expanded utility infrastructure. Stormwater upgrades on the Project Site would not retain stormwater on-site and would not result in an impact or service demand increase to any other public (or private) stormwater infrastructure on the Samoa Peninsula.

The Project would generate solid waste and recyclable materials within the capacity of existing local solid waste and recycling disposal facilities. The other projects considered in Table 3-1 would also inevitably generate some level of solid waste and recyclable materials that would also be transported to existing local solid waste and recycling disposal facilities. The combined solid waste and recyclable materials generated from all the projects would not require an expansion of local solid waste and recycling disposal facilities. Furthermore, the implementation of state and local waste reduction and diversion requirements and programs has and would continue to reduce the potential for exceeding existing capacities of the regional landfills, which still have adequate capacity. Any potential cumulative impact would be less than significant.

Mitigation Measures: No mitigation is necessary.

Level of Significance: Less than Significant

3.13.8 References

Humboldt Bay Municipal Water District. 2021a. Nordic Aquafarms and Mad River Water Flows Letter. July.

Humboldt Bay Municipal Water District. 2021b. Nordic Aquafarms Will-Serve Letter. August.

Humboldt Community Services District. 2015. Urban Water Management Plan. Available at: http://humboldtcsd.org/sites/default/files/2015%20UWMP.pdf

Recology. 2020. Recology Ostrom Organics – Capacity to Serve Nordic Aquafarms Letter. December 18, 2020.