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STAFF REPORT: REGULAR CALENDAR

Application No.: 1-16-1110

Consistency Certification No.: CC-0003-17

Applicant: City of Eureka

Location: Martin's Slough near the intersection of Pine Hill Rd. and Meyer's Ave., Eureka, Humboldt County (APNs: 301-211-006, 301-211-007, 301-221-001, 302-161-003, 301-031-008, 305-021-010, 305-021-011, 305-021-008, 305-031-001, 301-031-018, 301-031-013) (see [Exhibits 1 and 2](#)).

Project Description: Restore and enhance approximately 8000 feet of Martin Slough, its tributaries and associated riparian and wetland habitat (see [Exhibit 3](#)).

Staff Recommendation: Approval with conditions (CDP); Concurrence with conditions (Consistency Certification).

SUMMARY OF STAFF RECOMMENDATION

The City of Eureka proposes to restore and enhance approximately 8000 feet of Martin Slough and its tributaries including associated riparian habitat and wetland areas. The proposed project seeks to restore access and improve habitat for coho salmon, improve water quality, improve adjacent prime agricultural land, and increase the resiliency of the slough to extreme storm events and associated flooding. The City proposes to fulfill these goals by increasing the capacity of Martin Slough and substantially restoring in-channel and riparian habitat (see [Exhibit 3](#)).

The key Coastal Act issues raised by this project are the potential for adverse impacts to marine resources, dredging and filling of wetlands, and conversion of agricultural lands. To ensure that the City achieves its stated habitat enhancement objectives, **Special Condition 1** requires the City to submit a final revised habitat monitoring plan. To minimize potential impacts to marine resources from project-related construction, **Special Condition 3** requires the City to implement an aquatic species relocation plan during in-channel constructions, **Special Condition 4** requires the development of a Storm Water Pollution Prevention Plan (SWPPP), and **Special Condition 8** requires the City to implement a Slough Diversion and Dewatering Plan. To protect terrestrial species, **Special Condition 11** requires identification, avoidance and if necessary, relocation of sensitive plant species, and **Special Condition 12** requires identification and avoidance of nesting bird habitat. As conditioned, the Commission staff recommends the Commission find the proposed project would be consistent with Sections 30230, 30231 and 30232 of the Coastal Act.

Commission staff also recommends the Commission find the proposed project consistent with Sections 30233, 30236, 30241 and 30242 of the Coastal Act. Proposed dredging and filling within wetlands and the Martin Slough stream channel and the conversion of wetlands from seasonal wetlands within agricultural fields and a golf course to tidal, brackish or freshwater marsh meets the allowable use, no feasible environmentally superior alternative, and mitigation tests set forth in Coastal Act Sections 30233 and 30236. Conversion of prime and non-prime agricultural land to open water, marsh and riparian habitat also meets the tests described in Coastal Act Sections 30241 and 30242 due to the location of the slough along the urban/rural boundary, the limited viability of agricultural lands immediately adjacent to the slough due to flooding, and the expected enhancement of productivity of the surrounding agricultural lands.

Commission staff recommends that the Commission **approve** coastal development permit application 1-16-1110, as conditioned, and **conditionally concur** with consistency certification CC-0003-17.

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EXHIBITS

- Exhibit 1 – Project Site Map
- Exhibit 2 – Parcels within Project Area
- Exhibit 3 – Proposed Project Components
- Exhibit 4 – Jurisdictional Boundaries within Project Area
- Exhibit 5 – Temporary Access Roads - Downstream
- Exhibit 6 – Temporary Access Roads - Upsrtream
- Exhibit 7 – Project Staging Areas
- Exhibit 8a – Staging and Stockpile Areas – Downstream
- Exhibit 8b – Staging and Stockpile Areas - Upstream
- Exhibit 9 – Slough Dewatering Example
- Exhibit 10 – Agricultural Designations within Project Area

MOTION AND RESOLUTION

1. Coastal Development Permit

Motion:

*I move that the Commission **approve** Coastal Development Permit 1-16-1110 subject to the conditions set forth in the staff recommendation.*

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in conditional approval of the permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves Coastal Development Permit 1-16-1110 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

2. Consistency Certification

Motion:

I move that the Commission conditionally concur with the City of Eureka's Consistency Certification CC-0003-17 on the grounds that, if modified in accordance with the following conditions, the project described therein would be consistent with the enforceable policies of the California Coastal Management Program (CCMP).

Staff recommends a **YES** vote on the motion. Passage of this motion will result in a concurrence with the certification and adoption of the following resolution and findings. An affirmative vote of a majority of the Commissioners present is required to pass the motion.

Resolution to Conditionally Concur with Consistency Certification:

The Commission hereby conditionally concurs with the City of Eureka's Consistency Certification CC-0003-17 on the grounds that, if modified in accordance with the following conditions, the project described therein would be consistent with the enforceable policies of the CCMP.

II. APPLICANT'S CONSISTENCY CERTIFICATION

The City of Eureka has certified that the proposed activity complies with the California Coastal Management Program and will be conducted in a manner consistent with such program.

III. STANDARD CONDITIONS

The coastal development permit (1-16-1110) is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the Permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. **Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

IV. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions, as applicable to both Coastal Development Permit (CDP) No. 1-16-1110 and Consistency Certification (CC) No. CC-0003-17:

1. **Planting and Monitoring Program.** PRIOR TO ISSUANCE OF THE CDP, the Applicant shall provide, for the review and written approval of the Executive Director, a final revised monitoring plan for the Martin Slough Habitat Enhancement Project. The final revised plan shall substantially conform to the plan prepared by the Redwood Community Action Agency titled "Martin Slough Enhancement Project Monitoring Plan" dated August 2013, revised December 2016, except that the plan shall be revised to include all of the following:
 - a. A final planting and revegetation plan that includes the following:
 - i. Map of all planned restoration and impact areas indicating which areas will be actively planted and which areas will be monitored for passive restoration,

- ii. Plant pallet for each restored habitat type,
- iii. Description of the size and approximate number of container plants and the rate and method of seed application in each type of habitat, and
- iv. Provision that only native plant species shall be planted in the proposed restoration areas. All proposed plantings shall be obtained from local genetic stocks within the North Coast region (Mendocino to southern Oregon coast, within approximately 30 miles of the coastline). If documentation is provided to the Executive Director that demonstrates that native vegetation from local genetic stock is not available, native vegetation obtained from genetic stock outside of the local area may be used. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or as may be identified from time to time by the State of California shall be employed or allowed to naturalize or persist on the site. No plant species listed as a “noxious weed” by the governments of the State of California or the United States shall be utilized within the project area.
- v. Provision that all proposed planting shall be completed as soon as possible and no later than the end of the first full optimal planting season that occurs after completion of construction.
- vi. Provision that the use of rodenticides containing any anticoagulant compounds is prohibited.
- vii. Provision that insecticides and other pesticides that could harm aquatic or riparian organisms in Martin Slough shall be prohibited.
- b. An updated timeline for monitoring activities.
- c. A map of monitoring locations including sampling transects and/or plots.
- d. Submittal of as-built plans and photographs within 180 days of completion of each phase of construction that all wetlands, agricultural lands, and other sensitive habitats temporarily impacted by construction activities have been returned to pre-project conditions as proposed. This includes complete removal and restoration of stockpile areas, temporary access roads and bridges and staging areas.
- e. Description of vegetation monitoring methods that provide sufficient statistical power to demonstrate compliance with success criteria.
- f. Interim and final success criteria for total vegetation cover, total native plant cover and cover of invasive exotic species for marsh and riparian restoration areas. Success criteria should be justified based on data from a reference site and/or nearby successful restoration projects. Interim and final success criteria shall be developed for all of the following:
 - i. The plan shall specify success criteria for Year 2 for total vegetation cover and total native plant cover (i.e., specify coverages to be attained by the end of the second year following restoration implementation);
 - ii. The plan shall include contingency interim success criteria to be monitored in Years 3 and 4 if the Year 2 interim success criteria are not met; and
 - iii. Final success criteria for total vegetation cover and total native plant cover to be achieved by the end of Year 5. At a minimum, native cover should achieve 50% cover; invasive species cover should not exceed 10% and total cover in marsh and riparian areas should be based on reference site data;
- g. Description of and schedule for maintenance activities, including weeding, watering

- h. Provisions for completion of a wetland delineation within the restored marsh and riparian areas in the 5th-year following completion of restoration activities to verify the wetland status of the fill areas within the pasture and within the previously restored brackish marsh habitat;
- i. Requirement that before the restoration is deemed successful and permit conditions satisfied, final success criteria must be met for a minimum of two years without the benefit of adaptive management activities.
- j. Specific monitoring protocols and success criteria to assess water and salinity levels, other relevant water quality parameters and fish populations in Pond G and the North Fork prior to introduction of a muted tidal regime.
- k. A detailed description of fish monitoring procedures and reporting protocols.
- l. Requirements for remediation should the restoration area(s) not meet the approved performance standards. Remediation shall include a requirement that the permittee submit a remediation plan to the Executive Director that recommends further action and provides a timeline for additional monitoring and reporting. The remediation plan and results of post-remediation monitoring shall be processed as an amendment to this CDP, unless the Executive Director determines that no amendment is legally required;

The Applicant shall plant and monitor the project site in accordance with the approved final plan. No changes to the approved final plan may occur without an amendment to this permit unless the Executive Director determines that no amendment is legally required.

2. **Limitations on In-Channel Work.** In-channel construction and maintenance activities will be limited to the June 15 to October 31 dry season (November 15 if there is no significant rain event). In addition, the muted tide regulators shall be taken out of service during construction so that there shall be no incoming tide water during in-channel work.
3. **Aquatic Species Protection and Relocation.** Before any de-watering activities begin in any creeks or channels within the project area, fish screens shall be installed at the upstream and downstream ends of the construction reach, and all native aquatic vertebrates and larger invertebrates shall be relocated out of the construction area into a flowing channel segment by a qualified fisheries biologist holding appropriate permits. Cofferdams shall be installed within the fish screens at the upstream and downstream ends of the construction area and pumps or gravity flow pipes shall be used to convey water around the work site. In deeper areas, water levels shall first be lowered to manageable levels using a screened pump to ensure no impacts to fish and other special status aquatic species. A qualified fisheries biologist or aquatic ecologist shall perform appropriate seining, dip netting, electrofishing, or other trapping procedures to a point at which the biologist is assured that all individuals within the construction area have been caught. These individuals shall be kept in buckets equipped with battery operated aerators to ensure survival, and shall be relocated to an appropriate flowing channel segment or other appropriate habitat as identified by NMFS, CDFW, and USFWS as soon as feasible to minimize the holding time for the fish. Construction activities shall be prohibited from unnecessarily disturbing aquatic habitat. Introduced species, particularly Sacramento pike minnow, shall be documented and euthanized if captured. Cofferdams shall not be removed or tidegates opened until most

sediment has settled, which will minimize water quality degradation from suspended sediment and turbidity in the estuary.

- 4. Storm Water Pollution Prevention Plan.** PRIOR TO THE START OF CONSTRUCTION, the Permittee shall submit a Storm Water Pollution Prevention Plan (SWPPP) to the Executive Director for review and written approval. The SWPPP shall be developed by a certified SWPPP developer and approved by the North Coast RWQCB and submitted to the Executive Director for review and approval. As part of the SWPPP, Best Management Practices (BMPs) for controlling soil erosion and the discharge of construction-related contaminants will be developed and monitored for successful implementation. Individual SWPPPs may be prepared for various construction components or phases (e.g., Swain Slough berm repair, grading of one parcel, dredging channels, etc.). BMPs that shall be implemented as part of the SWPPP shall include, but not necessarily be limited to, the following:
- a. Cofferdams or other temporary fish barriers/water control structures shall be placed in the channel during low tide, and shall only be removed during low tide (if possible), after work is completed.
 - b. Because cofferdams shall be installed and the channel shall be dewatered prior to excavation, equipment shall not be operated directly within tidal waters or stream channels of flowing streams, after fish removal efforts have been completed.
 - c. Silt fences and/or silt curtains shall be deployed in the vicinity of the cofferdams and at excavation of sloughs at culvert installation and removal areas to prevent any sediment from flowing into the creek or wetted channels. If the silt fences are not adequately containing sediment, construction activity shall cease until remedial measures are implemented that prevents sediment from entering the waters below.
 - d. Sediment sources shall be controlled using fiber rolls, silt fences, sediment basins, and/or check dams that shall be installed prior to or during grading activities and removed once the site has stabilized.
 - e. Erosion control may include seeding, mulching, erosion control blankets, silt fences, plastic coverings, and geotextiles that shall be implemented after completion of construction activities.
 - f. The use of erosion and sediment control products (such as fiber rolls, erosion control blankets, mulch control netting, and silt fences) that incorporate plastic netting (such as polypropylene, nylon, polyethylene, polyester, or other synthetic fibers) is prohibited in order to minimize wildlife entanglement and plastic debris pollution.
 - g. Appropriate energy dissipation devices shall be used to reduce or prevent erosion at discharge end of dewatering activity.
 - h. Turbidity and pH monitoring shall be conducted in Martin Slough throughout the site stabilization period to ensure that water quality is not being degraded. During construction, turbidity measurements shall be taken and waters with turbidity exceeding a certain threshold shall be contained and prevented from being discharged into receiving waters. The turbidity threshold shall be developed in consultation with the North Coast RWQCB and justified in the SWPPP. Silt fences or water diversion structures shall be used to contain sediment. If sediment is not being contained adequately, as determined by visual observation or turbidity measurements, the activity shall cease until corrective measures are taken to remedy the situation.

- i. Construction materials, debris, and waste shall not be placed or stored where it can enter into or be washed by rainfall into waters of the U.S./State.
- j. Only upland areas shall be used for equipment refueling. If equipment must be washed, washing shall occur where wash water cannot flow into coastal wetlands or waters.
- k. Operators of heavy equipment, vehicles, and construction work shall be instructed to avoid sensitive habitat areas. To ensure construction occurs in the designated areas and does not impact environmentally sensitive areas, the boundaries of the work area shall be fenced or marked with flagging prior to commencement of work in that area.
- l. Equipment when not in use shall be stored outside of the slough channel and above high tide elevations.
- m. All construction equipment shall be maintained to prevent leaks of fuels, lubricants or other fluids into the slough. Service and refueling procedures shall be not conducted where there is potential for fuel spills to seep or wash into the slough.
- n. Extreme caution shall be used when handling and/or storing chemicals and hazardous wastes (e.g., fuel and hydraulic fluid) near waterways, and any and all applicable laws and regulations shall be followed. Appropriate materials shall be on site to prevent and manage spills.
- o. All trash and waste items generated by construction or crew activities shall be properly contained and remove from the project area.
- p. After work is completed, project staff shall be on site to ensure that the area is recontoured as per approved specifications. If necessary, restoration work (including revegetation and soil stabilization) shall be performed in conformance with the Revegetation and SWPP plans.

5. Contractor Training. All contractors that would be performing demolition, construction, grading, or other work that could cause increased water pollution conditions at the site (e.g., dispersal of soils) shall receive training regarding the environmental sensitivity of the site and need to minimize impacts. Contractors also shall be trained in implementation of stormwater BMPs for protection of water quality.

6. Minimize Pollution. Sites shall not be inundated (connected to tidal water or upstream freshwater sources) until surface soil conditions have been stabilized, all construction debris removed, and all surface soils have been removed from the site. Upon completion of construction, all construction materials, excess soils, excess vegetative spoils, and any other debris, waste, and other excess material generated by the authorized work will be lawfully disposed of at an authorized disposal site(s). Side casting or placing any construction materials, excess soils, excess vegetative spoils, and any other debris, waste, and other excess material generated by the authorized work within any wetland or environmentally sensitive habitat area is prohibited.

7. Instream Erosion and Water Quality Control Measures. In instances where excavation and/or dredging occurs in an effort to widen/deepen the existing channel, in-stream erosion and turbidity control measures shall be implemented. These measures include installation and maintenance of in-stream turbidity curtains and silt-fences along channel banks as specified in project designs, specifications, and erosion control plans; and use of coffer dams and stream bypass pumping around active construction areas.

- 8. Slough Dewatering and Diversion Plan.** PRIOR TO THE START OF CONSTRUCTION, the Permittee shall submit a Slough Dewatering and Diversion Plan to the Executive Director for review and written approval. The Plan shall implement one of the following approaches to disposing of water that is removed from the slough prior and during in-channel construction that has turbidity levels that exceed the threshold approved in the SWPP (see **Special Condition 4**):
- a. Install a holding tank for water that is pumped out of the slough. Once a sufficient amount of sediment has settled to the bottom of the tank and turbidity in the water is less than the required threshold, then the water can be discharged into a downstream segment of the slough.
 - b. Pump the water onto adjacent fields with the following requirements:
 - i. Filter bags shall be installed to catch sediment before the water is discharged
 - ii. Water shall be applied such that no area of agricultural grassland shall receive more than ½ inch of water in total.
- 9. Hazardous Materials Spill Prevention Control and Countermeasure Plan.** PRIOR TO ISSUANCE OF THE CDP, the Applicant shall submit a Hazardous Materials Spill Prevention Control and Countermeasure Plan (HMSPCCP) to the Executive Director for review and written approval. The Plan shall include the following provisions:
- a. An emergency spill cleanup kit shall be available and immediately accessible during all project-related activities.
 - b. If fuel storage containers are used exceeding a single tank capacity of 660 gallons or cumulative storage greater than 1,320 gallons, a Hazardous Materials Spill Prevention Control and Countermeasure Plan (HMSPCCP) shall be required and approved by the NCRWQCD. The HMSPCCP regulations are not applicable for chemicals other than petroleum products; therefore, the contractor shall prepare a spill prevention and response plan for the specific chemicals used during treatment activities.
- 10. Minimize Ground Disturbance.** Project work areas currently vegetated with native plants shall be protected unless they are in areas slated for excavation, fill, access roads or other essential items of work that involve ground disturbance. Prior to the start of construction in a particular area, all native vegetation to be avoided shall be clearly marked in the field by a qualified biologist.
- 11. Sensitive Plants.** Significant impacts to special-status plant species present or likely to be present onsite shall be minimized, avoided, and contingently compensated by complying with the following:
- a. Pre-construction surveys: PRIOR TO THE START OF CONSTRUCTION, the Permittee shall conduct pre-construction surveys for special-status plant species. Surveys shall be conducted as close to the start of construction activities as possible, but also in the appropriate season for optimal species-specific detection. Survey methods shall comply with CNPS/CDFW rare plant survey protocols, and shall be performed by qualified field botanists. Any populations of special status plant species that are detected shall be mapped. Populations shall be flagged if avoidance is feasible and population is located adjacent to construction areas. The locations of any special status plant populations to be

- avoided shall be clearly identified in the contract documents (plans and specifications). Results of the surveys shall be submitted to the Executive Director.
- b. Areas within the project footprint that support Lyngbye's Sedge and Humboldt Bay owl's clover that cannot be avoided shall be removed, stored in nursery containers, watered regularly to ensure survival, and re-planted on the restored landscape by a qualified field botanist. A plant salvage storage area shall be identified at the project site for the safe storage and care of salvaged plants. Root masses shall be divided to generate propagules, which shall be used to expand the area of Lyngbye's sedge into newly restored areas that provide the appropriate soil and habitat conditions. If Humboldt Bay owl's clover cannot be transplanted successfully, the Permittee shall collect seed from existing plants prior to removal and scatter the seeds in appropriate restored marsh habitat during revegetation activities.
 - c. If the pre-construction surveys indicate other special-status plant populations where construction would have unavoidable impacts, the Permittee shall prepare a Rare Plant Compensatory Mitigation Plan in coordination with USFWS or CDFW and submit it to the Executive Director for review and approval. The Plan shall include provisions for salvage, propagation, on-site reintroduction of rare plants into restored habitats, and monitoring protocols and success criteria for receiving sites, unless the Executive Director finds that these elements are not necessary to comply with the Coastal Act. These provisions shall incorporate scientifically sound genetic management guidelines and protocols for rare plants and may include the following:
 - i. Maintain some reserve clonal stock of perennial special-status plant populations during the monitoring period to offset the risk of failure in establishing populations in the wild.
 - ii. Set aside surplus reserve seed of annual special-status plants from impacted populations.
 - iii. Conduct long-term monitoring to determine the fate of managed special-status plant populations.
 - d. No special-status plant species shall be introduced to the site beyond their known historic geographic range unless such introduction is recommended by the USFWS or the CDFW and is approved as part of the Final Planting Plan required in **Special Condition 1**.

- 12. Bird Breeding and Nesting Habitat.** PRIOR TO ISSUANCE OF THE CDP, the Applicant shall submit, for the review and written approval of the Executive Director, a Sensitive Bird Nesting Habitat Protection Plan, prepared by a qualified biologist, for conducting seasonally appropriate pre-construction surveys for bird nesting habitat in the project area and protecting such habitat from construction impacts. The plan shall include, at a minimum, the following:
- a. Removal of vegetation during initial project construction or vegetation maintenance during the nesting season (March 1 – August 15) is prohibited.
 - b. Provisions for surveying the project area each year by a qualified biologist according to current Department of Fish and Wildlife protocols no more than one week prior to commencement of construction activities proposed to occur that year during the bird breeding and nesting season (March 1 through August 15) for the presence of active nesting habitat;
 - c. Provisions for avoiding construction activities other than vehicular use of roads during the nesting season(s) within 100 feet of an occupied nest of any native migratory bird

species; within 300 feet of an occupied nest of any special-status bird species; and within 500 feet of an occupied nest of any raptor species. No-disturbance buffers around active nests shall be maintained until completion of nesting unless the Executive Director, in consultation with CDFW and/or USFWS determines that reductions in buffer area would not significantly degrade the nesting habitat and is compatible with the continuance of that nesting habitat.

- d. Provisions for submittal of the surveys required above for the review and approval of the Executive Director prior to the commencement of authorized work each year during the bird breeding and nesting season that includes a map that locates any sensitive nesting habitat identified by the surveys and a narrative that describes sensitive habitat avoidance measures proposed.

The Permittee shall undertake development in accordance with the approved final sensitive bird nesting habitat protection plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this CDP, unless the Executive Director determines that no amendment is legally required.

13. Assumption of Risk, Waiver of Liability and Indemnity Agreement. By acceptance of this permit the Permittee acknowledges and agrees (i) that the site may be subject to hazards from flooding, tsunami wave run-up, erosion, and earth movement; (ii) to assume the risks to the Permittee and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

14. Protection of Cultural Resources. The Permittee shall implement the following measures to minimize potential impacts to cultural resources or human remains.

- a. During all construction phases and prior to initiating ground disturbance work, the Applicant shall conduct a pre-construction meeting with the field crew and an affiliated Tribal Historic Preservation Officer (THPO). The Permittee shall submit evidence of this meeting to the Executive Director within 14 days of the meeting.
- b. During all construction phases and prior to initiating ground disturbance work, the Applicant shall notify all affiliated THPOs prior to initiation of work to allow an opportunity to spot check digging activities.
- c. During all construction phases and for the life of the project, the Permittee shall adhere to and implement the inadvertent archeological discovery protocol that at a minimum requires for the immediate stop of work, notification of THPOs, retention of a qualified archeologists with local knowledge, and implementation of best practices for assessing the significance of the find. Additionally the protocol shall include establishing an exclusion zone, treatment of remains, that inadvertent discoveries shall be considered confidential, and contacting the County Corner. If buried archaeological or historical resources are encountered during construction activities, the contractor on-site shall call

all work in the immediate area to halt temporarily, and a qualified archaeologist is to be contacted to evaluate the materials. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, dietary bone, and human burials. If human burial is found during construction, state law requires that the County Coroner be contacted immediately. If the remains are found to be those of a Native American, the Permittee or the Coroner shall contact the California Native American Heritage Commission to determine appropriate treatment of the remains.

- 15. Other Agency Approvals.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall provide to the Executive Director a copy of a permit, a letter of permission, or evidence that no permit or permission is required from the following agencies:
- m. Humboldt County
 - n. Humboldt Bay Harbor, Recreation and Conservation District
 - o. North Coast Regional Water Quality Control Board
 - p. California Department of Fish and Wildlife
 - q. U.S. Army Corps of Engineers

The applicant shall inform the Executive Director of any changes to the project required by the Agencies listed above. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director issues a written determination that no amendment is legally required.

V. FINDINGS AND DECLARATIONS

A. PROJECT BACKGROUND

The Martin Slough watershed encompasses approximately 5.4 square miles and includes a mix of land uses including residential, agricultural, timberlands and municipal infrastructure (see [Exhibit 1](#)). The Martin Slough channel is approximately 10 miles long and empties into Swain Slough through a tidegate, which in turn empties into the Elk River and Humboldt Bay. Much of the upper watershed drains urban areas, mature second-growth redwood forests or recently harvested timber lands. The lower watershed drains a municipal golf course and low gradient pasturelands.

Historically, the Martin Slough watershed likely consisted largely of a mixed Sitka Spruce (*Picea sitchensis*)/willow (*Salix spp.*) forest transitioning to tidal salt marsh and estuarine habitat. Similar to other streams in the region, Martin Slough likely supported thriving populations of waterfowl, wading birds, shorebirds, raptors, numerous species of fish and other aquatic organisms, including several special status species. As the lower portions of the watershed were converted to farmland a century ago, a tidegate was installed at the confluence of Martin and Swain Slough to keep tidal waters out and maintain a mostly freshwater stream. The tidegate and the accompanying change in tidal regime partially blocked salmonid migration, degraded existing fish habitat, interrupted sediment flows and made it more difficult for the slough to fully drain during high flow periods, creating flooding problems throughout the lower watershed, including on prime agricultural land. Historically, accumulation of sediment within the slough was addressed through dredging. However, once coho salmon (*Oncorhynchus kisutch*), and tidewater goby (*Eucyclogobius newberryi*) were listed as endangered species, and since the

enactment of various environmental laws over the past several decades (including the Coastal Act), routine maintenance dredging was no longer feasible, leading to a loss of channel capacity and an increase in the duration of flooding on adjacent lands.

The proposed project is designed to address these problems. The first phase of the project, implemented in 2014 under Consistency Determination CD-021-13 (approved by the Commission on 5/9/13), included installing new tidegates where Martin Slough drains into Swain Slough. The new tide gates are designed to improve discharge capacity, improve aquatic organism passage, and reintroduce estuarine conditions to Martin Slough. Based on an alternatives analysis that compared different tidal regimes and acreages of restored marsh, the City and several stakeholders selected the alternative that would establish a maximum allowable muted tidal elevation of 6 feet within the slough. This alternative creates the desired estuarine conditions to support much needed fish habitat, but also avoids potential adverse impacts to the golf course turf from brackish waters. Phases 2 through 6 of the proposed project (described below) capitalize on the new tidal regime within the slough to further improve stream and riparian habitat for the benefit of listed and non-listed species as well as improving drainage on prime agricultural land.

B. PROJECT DESCRIPTION

The City of Eureka proposes to restore and enhance approximately 8000 feet of Martin Slough and its tributaries including associated riparian habitat and wetland areas. The overall purpose of the proposed project, referred to as the Martin Slough Enhancement Project, is to improve aquatic and riparian habitat and reduce flooding throughout the project area, including on prime agricultural land. The proposed project is specifically aimed at restoring access and improving habitat for coho salmon, improving water quality, and increasing the resiliency of the slough and surrounding lands to extreme storm events and associated flooding.

The City proposes to fulfill the goals of increasing the capacity of Martin Slough and substantially restoring in-channel and riparian habitat by: (1) enlarging the Martin Slough channel to allow for greater tidal exchange, (2) replacing several culverts and old bridges to increase channel capacity and improve habitat, (3) creating several new tidal ponds to provide critical habitat for coho salmon, (4) restoring portions of the adjacent floodplain and riparian areas through installation of large wood structures, re-grading, installation of cattle-exclusion wildlife-friendly fencing and revegetation to improve overall habitat value and hydrologic functionality, and (5) repairing portions of the earthen berm along Swain Slough. The proposed project will be carried out in up to 6 phases (see [Exhibit 3](#)):

- Phase 1: replacement of the tidal gate at the confluence of Martin Slough and Swain Slough. This phase was constructed in 2014 under CD-021-13.
- Phase 2: deepening of the most downstream reach of Martin Slough (station 0+00 to station 9+50), excavation of the adjacent Marsh Plain A, and excavation the southeast tributary and pond. Phase 2 also includes repairing the berm between Swain Slough and the Vroman property by adding 125 cubic yards of sediment to bring the elevation of eroded areas to 8.5 ft. (NAVD88). Finally, Phase 2 includes the relocation of a 6-inch gas line and the decommissioning of a 4-inch gas line by PG&E that traverse under

Martin Slough within the downstream reach. This project component is described in more detail below.

- Phase 3: excavation of a new channel in the North Fork at the upstream end of the Slough, shallowing of portions of the old channel, construction of a new brackish/freshwater pond (Pond G), and restoration of portions of the adjacent floodplain to improve drainage.
- Phase 4: deepening of Martin Slough channel near the meander bend (station 9+50 to station 30+50), deepening of the meander bend (stations M 0+00 to M 20+46), excavation of Marsh Plain B adjacent to the meander bend, replacement of the culverts at meander stations M 0+45 and M 20+10), construction of Pond C, and replacement of an existing 40-foot long, 5-foot diameter culvert across from the barn on the NRLT property (from station MS 16+65 to MS 14+05) with a bridge. Phase 4 will also include the installation of large wood habitat structures, grade control weirs, riparian fencing, re-vegetation of floodplain and riparian areas and installation of scour protection for an existing 12-inch gas line that crosses the meander bend at two locations.
- Phase 5: deepening of Martin Slough on City of Eureka property (station 30+50 to 46+00), excavation of Pond D, Pond E and the east fork, installation of scour protection over a 12-inch gas line crossing on the east fork, installation of large wood habitat structures, replacement of 6 existing bridges and their associated footings, installation of grade control weirs, and revegetation.
- Phase 6: deepening of most upstream reach of Martin slough on City of Eureka property (station 46+00 to 62+80), excavation of Pond F, replacement of 4 existing bridges and their associated footings, removal of 4 existing bridges and their associated footings, installation of large wood habitat structures, installation of grade control weirs, hauling and disposal of spoils, re-grading of portions of the adjacent floodplain, and revegetation

Phase 2 is expected to take 3 to 4 weeks to construct, and is scheduled for the summer of 2017. Phases 3 and 4 will be implemented during the summer of 2018. Phases 5 and 6 are not yet funded. The City anticipates that each of these final phases will be implemented during one construction season (June 15 – October 15) over a 4 to 12-week period. The overall result of the proposed project will be an approximately 20% increase in tidal prism within the slough and approximately 19.3 acres of new aquatic and riparian habitat. Specific project components are described in more detail in the sections below.

The proposed project includes the use of several different staging areas and the construction of temporary access roads and bridges to facilitate project activities (see [Exhibits 5-7](#)). All work conducted on NRLT property will be staged from Pine Hill Road. Work conducted on City of Eureka property will be staged from one of the Eureka Municipal Golf Course maintenance parking lots. PG&E's gas line decommissioning work will be staged from a PG&E work area just north of the NRLT property and on the southeast corner of the Shanahan property. The City estimates that the proposed project will require approximately 3250 to 6500 truck trips both onsite and offsite.

A temporary bridge will be constructed along the downstream reach of Martin Slough to create an entranceway for machinery to access the project site. An additional temporary bridge may be constructed to allow access between the eastern meander and the stream channel further

upstream. A main temporary access road will be constructed along the southern bank of the slough with small temporary arterial roads potentially necessary to reach parts of the project site. Temporary access roads will either be constructed by proof-rolling native subgrade to provide a non-yielding surface or placement of crushed rock or river-run gravel over geotextile fabric and geo-grid. All temporary access roads will be constructed with the minimum necessary footprint to allow safe passage of trucks. Once the project is completed, all access roads will be disassembled, de-compacted and re-vegetated to their pre-project state.

Excavated soil from the channel and the ponds will be used onsite to restore adjacent floodplain areas, repair the berm at Swain Slough (see below) or hauled off-site. The project will result in approximately 64,800 yd³ of excavated material, 9,900 yd³ of fill within the project footprint and 26,000 yd³ of material hauled off-site. The proposed project includes temporary stockpile areas that will likely be located at the end of Pine Hill Road on NRLT property near the staging parking lot on the City of Eureka property (see [Exhibit 8](#)). Once material is placed within a stockpile area, the City expects to transport this material to reuse areas onsite or offsite within a day or two. If the material will not be used onsite, it will be transported off-site to White Slough in the Humboldt Bay National Wildlife Refuge for use in a wetland restoration and sea level rise adaptation project. All excavated material that will not be reused on-site will be confined to the designated stockpile area and will be transferred off-site before completion of the proposed project.

At the conclusion of earth-moving activities, the City will implement a revegetation plan, with the goal of creating native, forested riparian, wetland and tidal marsh habitats along the expanded slough and pond system. The excavated reaches of Martin Slough and the new pond areas will be revegetated using a combination of active planting and passive revegetation with invasive plant control. Active planting will include re-seeding pasture and golf course areas, planting of trees and shrubs within the riparian zone and planting of native brackish and freshwater wetland in wetland areas. To the extent feasible, plant material will be salvaged from the project impact footprint. Cattle exclusion wildlife-friendly fencing will be installed around the perimeter of the riparian forest and along the channel through the pasture to protect the habitat.

Enlarging the Martin Slough channel

The City proposes to enlarge the Martin Slough channel to achieve a tidal prism of 20 acre-feet. The City will deepen and in some cases widen the channel by dewatering and excavating within the channel one reach at a time. Cofferdams will be installed on either end of a reach and then the contractor will pump the water within the work area into a holding tank located on the banks of the slough. Cofferdams will be constructed from one of the following: (1) excavated sediment, (2) washed gravel encased within an impermeable geotextile or visqueen liner in combination with ecology blocks, or (3) water bladders. A combination of pumped and gravity diversion pipes will be used to reroute upstream flows around the work area to the downstream portion of the slough. Each dewatered work area will not exceed 1000 feet and will be dewatered for a maximum of 5 days. [Exhibit 9](#) shows a conceptual schematic of how the City will set up each work area.

The City will employ several measures to minimize impacts to fish during dewatering and excavation of the slough. Fish screens will be installed immediately upstream of the coffer dam

to prevent aquatic organisms from entering the bypass pipe. Prior to installing the coffer dams and dewatering, a fish biologist will use seines to corral fish out of the work area and into adjoining waters. In addition, as a reach is being dewatered, the fish biologist will capture and relocate any fish that remain in the work area as the water level decreases.

Once a reach of Martin Slough is dewatered, the City will use large equipment to excavate sediment and haul it to an on-site reuse site or a temporary stockpile area. The channel cross-section will be constructed in a trapezoidal shape with a side slope of 0.67 (1 unit vertical: 1.5 units horizontal). The slough will have a constantly decreasing longitudinal slope of 0.25% in the upper reaches and 0.02% in the lower reaches to ensure proper drainage. It is expected that the channel will self-adjust into a more typical U-shaped cross-section once tidal action is restored.

Floodplain Improvements

As described above, in addition to enlarging the size of the Martin Slough channel, the City also proposes to restore tidal, brackish and freshwater marsh and aquatic habitats in the channel's riparian corridor. These restored areas will provide important habitat for aquatic and riparian species and will also improve the hydraulic connectivity and drainage of the Martin Slough watershed. The City proposes approximately 18.3 acres of new marsh and pond habitat (see [Exhibit 3](#) and [Table 1](#)). In addition, the City proposes to fill some low areas within the golf course along the upper reaches of the slough to a minimum elevation of 7 feet (NAVD88) to eliminate the potential for stranding of coho salmon and tidewater gobies during flooding events and to improve drainage of the floodplain into the slough.

PG&E Gas Line Protection, Relocation, and Decommissioning

As part of Phase 2, PG&E will relocate approximately 130 feet of a 6-inch natural gas line (Line L 126A) and decommission a 4-inch gas line (Line L 126B) that cross under Martin Slough just west of the meander bend. These project elements are necessary because the proposed deepening of the Martin Slough channel will reduce the soil cover over the gas line to less than PG&E's required minimum depth of coverage. Although incorporated into the City's project description, PG&E will design and implement work on the gas lines. Although an initial stumbling block for the Martin Slough Enhancement Project, PG&E agreed to perform the relocation and abandonment of these lines as mitigation for a shortfall in CDP requirements to restore wetland and non-wetland areas within the Humboldt Bay Power Plant site. Special Condition 6 of CDP 9-15-0531 requires that PG&E perform the gas line relocation and abandonment work to facilitate the City's restoration work in the slough.

To relocate the 6-inch line, PG&E will first shut off gas to the line and vent any remaining gas into the atmosphere. While the City is performing work within the channel section where the two pipelines cross and the channel is dewatered, PG&E will dig a pit to expose the 6 inch pipeline, cut both ends of the pipeline on either side of the channel and remove the 6 inch line. PG&E will then install a new 6 inch line that crosses under the slough at a sufficient depth to avoid interference between the pipeline and the deepened channel (i.e., a minimum of 5 feet). The new pipeline will either be installed using open trenching or directional drilling. Once the new line is installed, pressure-tested and put back into service, the excavated areas will be filled back in and the surface restored to its initial condition or to the City's proposed restored

condition. PG&E has determined that the 4 inch line is a redundant line and is buried at a sufficient depth to avoid interference with the new stream channel. Thus, the 4 inch line will be decommissioned as opposed to relocated. The line will be vented, cut and capped and then abandoned in place.

Under phases 4 and 5, the City will also install scour protection over a 12-inch gas line (Line L 177) in three locations where it crosses the meander on the NRLT property and the East Tributary on the golf course. The proposed project will lower the bottom elevation of the channel in most locations, thus making scour protection necessary to prevent further reduction of the depth of soil cover over the gas line from natural channel scour. The proposed scour protection consists of placement of woven geo-textile fabric and an erosion protection mat (Armorflex™ or similar), over the gas line at each location where it crosses the slough. Scour protection will be installed in conjunction with in-channel work at each location.

C. JURISDICTIONAL BACKGROUND

The proposed project is located both inside and outside of the coastal zone (see [Exhibit 4](#)). The majority of the project in the coastal zone is within the Commission's retained jurisdiction. However, a small portion of the project area within the coastal zone is within Humboldt County's Local Coastal Program (LCP) jurisdiction. The portion of the project outside the coastal zone is subject to the Commission's federal consistency authority. Thus, the project description included here encompasses the entirety of the proposed project.

Section 30601.3 of the Coastal Act provides that when a project requires a coastal development permit from a local government with a certified Local Coastal Program and the Coastal Commission, a single, consolidated coastal development permit for the entire project may be processed by the Coastal Commission if the applicant and local government agree to that process. On January 4, 2017, Humboldt County agreed to a consolidated permit under Section 30601.3 of the Coastal Act. The applicant also agreed to a consolidated permit for the portions of the project within the County's jurisdiction. Thus, while the proposed project spans two different jurisdictions, the Commission is authorized, based on Coastal Act Section 30715 and the consolidated permit process in Section 30601.3, to review the entire project for consistency with the Chapter 3 policies of the Coastal Act, with the County's LCP used for guidance.

D. OTHER AGENCY APPROVALS

Humboldt County

Humboldt County (County) is the lead agency under the California Environmental Quality Act (CEQA) and will also issue a Conditional Use Permit (CUP) for the proposed project. On April 30, 2017, the County released a draft Initial Study and Mitigated Negative Declaration (MND) for the proposed project. The County Planning Commission is scheduled to vote on the CUP and MND on June 1, 2017.

Humboldt Bay Harbor, Recreation and Conservation District (HBHRCD)

The HBHRCD will issue a Administrative Permit for the proposed project. The City submitted an application in early May that is still pending.

North Coast Regional Water Quality Control Board

The RWQCB regulates waste discharges into receiving waters in the project area. On February 13, 2017, the Applicant submitted an application for a Section 401 water quality certification. The RWQCB is expected to issue a final water quality certification in July 2017.

California Department of Fish and Wildlife (CDFW)

The CDFW regulates any activity that could change the natural flow of a river, stream or lake or impact the beds of these systems. On March 28 2017, the Applicant submitted an application for a Lake and Streambed Alteration Permit. CDFW is reviewing the application and a decision is pending.

U.S. Army Corps of Engineers (USACE)

The USACE has regulatory authority over the proposed project under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 1344) and Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344). The Applicant requested federal authorization from the Corps on November 23, 2016. The Corps is processing the request under an individual permit and a final decision is expected in July 2017. The individual permit will include consultations with the United States Fish and Wildlife Service and the National Oceanic and Atmospheric Administration.

E. MARINE RESOURCES AND WATER QUALITY

Section 30230 of the Coastal Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30232 of the Coastal Act states:

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

As cited above, Coastal Act Sections 30230 and 30231 require, in part, that marine resources and coastal wetlands and waters be maintained, enhanced, and where feasible restored. These policies specifically call for the maintenance of the biological productivity and quality of marine resources, coastal waters, streams, wetlands, and estuaries necessary to maintain optimum populations of all species of marine organisms and for the protection of human health.

The project area currently includes several types of habitat and supports numerous aquatic and terrestrial species (see [Exhibit 3](#)). Martin Slough currently supports some tidal aquatic habitat at the lowest reaches, but the majority of the slough is brackish or freshwater habitat with very little vegetation. There is a small amount of brackish marsh on the banks of the downstream end of the slough, and freshwater marsh habitat along the upper reaches. Notably, Pond E is an off-channel freshwater pond that provides excellent rearing habitat for juvenile coho salmon. In addition to coho salmon, the slough also supports several fish species including tidewater goby, California coastal chinook (*Oncorhynchus tshawytscha*), and coastal cutthroat trout (*Oncorhynchus clarkii*). Northern red-legged frogs (*Rana aurora aurora*) have also been found in the channel south of the golf course.

In addition to aquatic habitat, the project area includes small patches of willow-alder riparian forest/scrub habitat along the banks of the slough, agricultural grassland in the downstream portion of the project area and golf course grassland in the upstream portion of the project area. The agricultural grassland is used for cattle-grazing and supports several species of annual and perennial grasses including Lyngbye's sedge (*Carex lyngbyei*), which is listed as a rare plant (List 2.2) by the CDFW's Natural Diversity Database. In addition to the cattle that graze the pastures, these areas support a variety of small mammals, passerine bird species including swallows and blackbirds, and raptors. Due to the low elevation of the agricultural pastures, most of the grassland areas are also seasonal wetlands. During periods of inundation, the grassland also supports waterfowl and shorebirds. The site currently supports an active osprey nest in the upper portions of the project area. Vegetation and wildlife species present at the golf course are similar to those found in the agricultural grassland, although species tolerant of human activities tend to be more dominant.

Restoration of Aquatic and Riparian Habitat

The proposed project seeks to restore and enhance tidal, brackish and freshwater habitat and improve drainage within approximately 120 acres of the lower Martin Slough watershed. In particular, the project aims to improve habitat for several special-status species including coho salmon, tidewater goby, California coastal chinook, and coastal cutthroat trout. The stated goals of the proposed project are certainly consistent with Coastal Act requirements to restore marine resources and coastal streams and wetlands and maintain healthy populations of marine organisms. However, it is important to ensure that (1) the proposed project achieves its stated habitat enhancement objectives and actually restores coastal marine and wetland resources, and (2) adverse impacts to marine resources from construction of the proposed project do not impair the biological productivity and quality of coastal waters.

As discussed above, one of the main purposes of implementing the proposed project is to improve access and habitat quality within Martin Slough for salmonids and tidewater gobies. This will be achieved through improvement to instream habitat by removal of invasive species,

expansion of rearing habitat through increases to the channel capacity and creation of new channel-connected ponds, and restoration of riparian areas that will exclude cattle, stabilize streambanks and provide shade and instream cover. CDFW biologists specifically identified over-wintering high flow refugia areas, such as the proposed riparian and floodplain areas adjacent to the channel, as a critical habitat component for coho salmon in Martin Slough. To further improve the functionality of these riparian refugia areas and eliminate potential adverse impacts on salmonids and other fish species, the City proposes to raise the elevation of several low areas in the floodplain, including two areas within the adjacent pastureland and one area within the golf course, to eliminate the potential for fish stranding. In addition, re-establishment of tidal influence to the slough will improve adult salmonid migration and spawning runs. The City will also install wildlife-friendly fencing that ensure that cattle are kept out of newly restored areas, thus minimizing the potential for direct impacts to riparian vegetation, channel stabilization and water quality, while facilitating the movement of other wildlife through the site.

To demonstrate that the project meets its intended physical, hydrological, and biological goals, the City proposes to implement the Martin Slough Enhancement Project Monitoring Plan (Plan) (dated August 2013, revised 2016). The Plan states that “The essential purpose of monitoring activities is to raise a warning flag if the project’s enhancement design components or the current course of management actions are not working so that corrective actions and adaptive management may be applied while cost-effective and time sensitive solutions are still available.” The Plan incorporates both construction monitoring and post-construction monitoring and includes overall goals for the monitoring effort, general description of qualitative and quantitative monitoring methods, schedule and data analysis for both physical and biological parameter, success criteria for most parameters, potential adaptive management strategies and a reporting schedule.

The City’s proposed Monitoring Plan includes many important elements to ensure that the proposed project meets its restoration goals. However, the Monitoring Plan is also missing several critical elements. These include: (1) a detailed planting plan; (2) updated timeline for monitoring activities; (3) a map of monitoring locations including sampling transects and/or plots; (4) verification that all wetlands, agricultural lands, and other sensitive habitats temporarily impacted by construction activities have been returned to pre-project conditions as proposed; (5) description of vegetation sampling methods that provide sufficient statistical power to demonstrate compliance with success criteria; (6) interim and final success criteria for total, native and exotic invasive vegetation cover for each habitat type; (7) detailed description of fish monitoring; (8) completion of a wetland delineation in the 5th year following completion of restoration activities; and (9) requirement for submittal of a remediation plan, if necessary.

To ensure that the proposed restoration project will achieve the objectives for which it is intended, the Commission requires **Special Condition 1**. This special condition requires the applicant to submit a final revised habitat monitoring plan for the Executive Director’s review and approval that substantially conforms to the submitted plan, except that it shall be revised to include provisions for all of the above. Furthermore, **Special Condition 1** requires that the final revised Plan include provisions for remediation to ensure that the goals and objectives of the restoration project are met. Inclusion of Special Condition 1 ensures that the City constructs the project as proposed and that restoration of marine, stream and wetlands habitat is successful.

Construction-related Impacts

If successful, the proposed project, with the inclusion of **Special Condition 1**, will significantly improve habitat for aquatic and riparian species. However, construction of the proposed project could have short-term adverse impacts on existing habitats and species. Fish species including coho salmon, tidewater goby, California coastal chinook, and coastal cutthroat trout could be harmed by dewatering and construction in the channel. To address these concerns, Humboldt County (County), the lead CEQA agency, included a mitigation measure (BIO-1) in the draft Initial Study/Mitigated Negative Determination that limits in-channel work to the dry season (defined as between June 15 and October 31, or November 15 in the absence of a significant rain event). In addition, BIO-2 requires the City to conduct a fish relocation program prior to dewatering activities that includes installation of fish screens upstream and downstream of the work area and relocation of all native aquatic vertebrates and large invertebrates to a flowing channel segment by a qualified fisheries biologist. Specifically, the biologist will use seining, dip netting, electrofishing or other appropriate trapping procedures to ensure all individuals are removed from the work area. The captured fish and other aquatic vertebrates and invertebrates will be transferred first to aerated buckets and then to appropriate habitat within a flowing segment of the slough. The relocation program will also ensure that impacts to red-legged frogs are minimized. Once work is completed in a particular stream segment, BIO-2 also requires the City to remove coffer dams or open tidegates only after most of the sediment has settled to minimize impacts on aquatic species from suspended sediment. BIO-1 and BIO-2 have been incorporated into this CDP as **Special Conditions 2 and 3**, respectively.

In addition to potential effects from project construction, changes to the tidal regime and the introduction of brackish water into Pond E, which currently supports juvenile salmon with the highest growth rates of any other site in Humboldt Bay, could result in a loss of habitat for juvenile coho salmon. Although the proposed restoration includes creation of new freshwater habitat further upstream, it is possible that if muted tidal flows were introduced before the new freshwater habitat was available, there could be a temporal loss in rearing habitat. To address this concern, the City adjusted the phasing of the project. Based on a recommendation by CDFW, the phasing was altered to ensure that Pond G, a new freshwater pond proposed in the upper portion of the project area, was constructed during an earlier phase of the project, before the muted tidal prism is restored. The City will construct Pond G and verify use of this habitat by juvenile coho before a muted tide is introduced and Pond E becomes seasonally brackish. To further ensure that Pond G provides the critical freshwater habitat before muted tidal influence is introduced, **Special Condition 1(a)(ix)** requires the City to develop specific monitoring protocols and success criteria to assess water and salinity levels, other relevant water quality parameters and fish populations in Pond G and the North Fork prior to introduction of a muted tidal regime.

Construction-related erosion could also result in adverse impacts to aquatic communities and water quality within and downstream of the Martin's Slough. In-channel work to widen and deepen the main channel, excavation of on-stream ponds or upland restoration activities could result in elevated levels of turbidity downstream. According to the draft IS/MND, elevated suspended sediment levels can cause "mortality, illness, or injury of coho salmon due to re-suspended contaminants, clogging and abrasion of gill filaments, low-oxygen water, and

interference with feeding due to poor visibility (LFR Levine-Fricke 2004). Sediment can also smother coho salmon eggs, which would affect future fish stocks (Hobbs 1937).” Excessive sediment could result in similar effects on other fish species, such as Chinook salmon and tidewater goby, as well as other aquatic vertebrates and invertebrates. In general, increased turbidity levels are expected to be temporary and short-lived. In the long-term, restoration activities are expected to decrease the amount of sediment entering the slough, thus resulting in an overall improvement to the aquatic habitat.

To minimize impacts from project-related erosion, the IS/MND includes several water quality mitigation measures. WQ-1 requires the City to develop a Storm Water Pollution Prevention Plan (SWPPP) that shall be approved by the North Coast RWQCB and implemented during construction. Some of the key required components include:

- Prohibition of the use of equipment in a flowing channel
- Use of silt fences or silt curtains in conjunction with coffer dams, in-channel excavation and culvert installation and removal areas
- Use of other erosion control measures including fiber rolls, sediment basins and/or check dams
- Provision to pump excess water into surrounding fields to prevent sediment-laden water from entering the stream channel
- Monitoring of turbidity and pH during site stabilization phase
- Proper maintenance, storage and refueling of equipment away from aquatic areas
- Revegetation of work areas to stabilize soils

In addition to WQ-1, the IS/MND includes: (1) WQ-2: requires the City to implement contractor training regarding the sensitivity of the project site and the need to minimize water quality impacts; (2) WQ-3: requires the City to ensure that soil conditions are stabilized before inundating a site; (3) WQ-4: requires the City to implement in-stream turbidity curtains, silt fences, coffer dams and stream bypass pumping during in-channel excavation work; and (4) WQ-5: requires the City to develop a Dewatering and Creek Diversion Plan which describes the proposed dewatering and diversion strategies and incorporates use of sediment basins and water quality analysis to avoid releasing highly turbid water back into the slough.

These mitigation measures have been incorporated into this CDP as **Special Conditions 4, 5, 6, 7 and 8** with a few notable changes. The IS/MND’s SWPPP requirement related to disposal of excess water into surrounding fields does not sufficiently protect the biological value of the surrounding agricultural grasslands. Diverting a significant amount of water to nearby fields during the dry season could facilitate establishment of exotic species or lead to excess amounts of sediment deposited on surrounding fields. In properly disposing of seepage water, the principal concern is to avoid discharging sediment-laden water into downstream areas of the slough. The secondary concern is to avoid unintentional adverse impacts from discharging water or excess sediment onto the agricultural grassland and seasonal wetland during the dry season. To address these concerns, **Special Condition 8** requires the City to develop a Dewatering and Diversion Plan for the Executive Director’s review and approval that incorporates one of two approaches. The first approach is to install a holding tank for water that is pumped out of the

slough. Sediment in the water will settle to the bottom of the tank and then the low-turbidity water can be pumped into a downstream segment of the slough. The second approach would be to pump the water onto the adjacent field with two important limitations: (1) filter bags will be installed to catch sediment before the water is discharged, and (2) water will be applied such that no area of agricultural grassland will receive more than ½ inch of water in total. If the second approach is implemented, limitation (2) would only apply to agricultural grasslands, and not to the golf course area because the golf course grasses are highly managed and acclimated to regular water application, including during the dry season.

The second change to the water quality-related conditions in the IS/MND that are incorporated as Special Conditions in this CDP relate to turbidity monitoring. WQ-1 includes a requirement that the City monitor turbidity during the site stabilization period to ensure that water quality is not degraded. However, WQ-1 does not provide specific limits that define when turbidity reaches a level that could be deleterious to fish or other aquatic organisms. However, the City is currently working with the North Coast RWQCB to develop an appropriate turbidity threshold. To address this concern, **Special Condition 4**, which incorporates the provisions of WQ-1, adds a requirement that the SWPPP include a turbidity threshold, developed in consultation with the North Coast RWQCB, above which water will be considered turbid and will not be discharged into receiving waters until actions can be taken to reduce the turbidity. This requirement ensures that turbidity of receiving waters will be minimized and adverse impacts to aquatic organisms from excessive suspended sediment concentrations will be avoided.

In addition to erosion-related water quality impacts, proposed project construction, especially in-channel construction, could potentially increase the risk of oil spills in or adjacent to coastal waters due to use of motor vehicles and equipment. If contaminants such as fuel oils or grease enter the slough, they could result in acute toxic effects or abnormalities in fish and other aquatic organisms. The SWPPP, required under **Special Condition 4**, will address some of the risk associated with an oil spill by requiring project equipment to be stored and refueled in upland areas, and to be maintained to prevent leaks. Further, **Special Condition 9** (included in the IS/MND as HHM-1) requires the City to maintain emergency spill kits and to develop a Hazardous Materials Spill Prevention, Control and Countermeasure Plan if the worst-case spill volume exceeds 660 gallons from a single vessel, or 1320 gallons cumulatively. With these conditions incorporated the proposed project will protect against the spillage of hazardous materials and ensure that adequate containment and cleanup resources are available in the unlikely event of a spill.

In conclusion, for the reasons stated above, the Commission finds the proposed project, as conditioned will maintain and enhance the functional capacity of the habitat, maintain and restore optimum populations of marine organisms, protect human health, and protect against releases of oil products as mandated by the requirements of Sections 30230, 30231 and 30232 of the Coastal Act

F. ENVIRONMENTALLY SENSITIVE HABITAT

Coastal Act Section 30240 states:

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The project area supports several special-status terrestrial species of both flora and fauna. Two rare coastal brackish or freshwater marsh species, Lyngbye's sedge (CNPS rank 2B.2) and Humboldt Bay Owl's clover (CNPS Rank 1B.2) have been documented on the banks of Martin's Slough and Swain Slough respectively, though not in population sizes sufficient to constitute ESHA. Although in the long term, the proposed project will create more potential habitat for these species, construction activities will result in the removal of some patches of Lyngbye's sedge and could result in the disturbance of Humboldt Bay Owl's clover. To minimize impacts to these and other potential rare plant species, the IS/MND requires BIO-4, BIO-5 and BIO-6, adapted and incorporated into the CDP as **Special Conditions 10** and **11**. These measures require the City to: (1) minimize the ground disturbance footprint to avoid impacts to sensitive plant species; (2) conduct pre-construction surveys to identify all sensitive plant species within the project footprint; (3) remove, store and replant individuals of Lyngbye's sedge and Humboldt Bay Owl's clover; (4) if other sensitive plant species are present, submit a Rare Plant Compensatory Mitigation Plan that includes provisions to salvage, propagate, and re-introduce plants into restored habitats as well as monitoring protocols and success criteria.

In addition to impacts to rare plant species, the proposed project has the potential to adversely impact birds and other terrestrial species. According to the IS/MND, the grassland and riparian forest and scrub habitats present in the project area "may support nesting by state bird species of special concern, as well as numerous species protected under the Migratory Bird Treaty Act." For example, California Spotted Owls (*Strix occidentalis occidentalis*), a CDFW species of concern and pending on the federally endangered species list, are known to occur to the south and southeast of the project area. In addition, there is a known osprey nest on the golf course property within the project site.

Project-related construction could result in disturbance from noise and construction activity or displacement due to vegetation removal in riparian areas. According to the IS/MND, for the spotted owl, noise levels could reach the threshold of take at distances of 330 feet during worst-case scenario high noise events, or 165 feet under more typical noise conditions. In addition, visual disturbance (direct line of site) could occur at 131 feet. However, because the nearest spotted owl territory is located more than 4000 feet from the proposed construction area, impacts due to noise or visual disturbance are highly unlikely. To ensure that impacts to other nesting bird species are avoided, the IS/MND includes mitigation measure BIO-3, adapted and incorporated into this CDP as **Special Condition 12**, that requires the City to submit a Sensitive Bird Nesting Habitat Protection Plan that prohibits removal of vegetation during the nesting season (March 1- August 15), requires pre-construction surveys for nesting birds prior to other construction activities, and if nests are found, establishes an exclusion zone around the nest. In

addition, **Special Condition 10** requires the City to minimize the ground disturbance footprint which will also minimize impacts to nesting birds and other terrestrial species.

With these conditions in place, the Commission finds that the proposed project is designed and sited to prevent impacts that would degrade the habitat value of the project area and surrounding lands, and is thus, consistent with Coastal Act Section 30240 (b).

G. DREDGING AND PLACEMENT OF FILL IN WETLANDS AND COASTAL STREAMS

Coastal Act Section 30233(a) states:

The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

- (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.*
- (2) Maintaining existing, or restoring previously dredged depths on existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*
- (3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.*
- (4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*
- (5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
- (6) Restoration purposes.*
- (7) Nature study, aquaculture, or similar resource dependent activities.*

Coastal Act Section 30236 states:

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

As discussed in Section B above, the proposed project will involve diking, dredging, and filling of wetland and stream habitat as well as the conversion of one wetland type to another. Wetland dredging and/or filling will occur extensively across the project area, including impacts to estuarine marsh, estuarine aquatic, riparian, freshwater aquatic, and seasonal freshwater wetland habitats (e.g., the many acres of agricultural grasslands in the area that also function as seasonal wetlands or “transitional agricultural lands”). Diking will occur in the form of temporary coffer dams constructed in the main river and creek channels to separate construction areas from wetted channel habitat. The proposed project will result in the conversion of 1.1 acres from disturbed riparian/seasonal marsh habitat to aquatic stream habitat, 7.4 acres of seasonal wetland/agricultural grassland to salt marsh and freshwater/brackish marsh habitat, and 7.6 acres of seasonal wetland/golf course grassland to freshwater/brackish marsh and seasonal/riparian wetlands. Table 1 shows the current and projected habitat types in the project area.

In addition to the wetland conversion described above, the proposed project will also result in dredging and fill of wetlands and stream channels. A wetland delineation of the project area found that due to the low elevation of the project area, almost the entire site meets the definition of a wetland under the Coastal Act. There are a few isolated upland areas, including the top of the Swain Slough and some areas at the top of the banks along Martin Slough berm. But otherwise, any cut and fill associated with the proposed project (including creating new salt marsh, enlarging the stream corridor, and creating new brackish and freshwater pond habitat) is considered dredging and fill of wetlands under Coastal Act Section 30233 or substantial alteration of a stream channel under Coastal Act Section 30236. Table 2 shows the total cut and fill volumes by project phase and location; the project will result in approximately 65,000 cubic yards of cut and 10,000 cubic yards of fill. In addition to the dredging and filling required to facilitate the wetland conversions and habitat improvements described above, approximately 1.26 acres of existing seasonal wetlands, located in the agricultural pasture or golf course areas will be filled to improve drainage and to eliminate the possibility of fish stranding during high flow events. The elevation of these areas will be brought up to approximately 7 ft NAVD88, but will still meet the definition of seasonal wetland habitat. Repairs to the Swain Slough berm will result in the addition of fill to the top of the berm, which was not delineated as wetland and will not result in an increase in the footprint of the berm. Thus, no dredging or fill of wetlands will occur during repair of the Swain Slough berm.

In addition to the permanent impacts described above, project-related construction will result in temporary impacts to wetlands and streams. Activities including vegetation clearing, grading and installation of restoration features (i.e., root wads), dewatering activities, and construction and use of access roads and staging areas could result in disturbance to existing wetland habitat.

Coastal Act Section 30233(a) imposes three tests on a project that includes dredging and/or fill of open coastal waters or wetlands. The first test requires that the proposed activity must fit into one of the seven categories of enumerated uses. The second test requires that there be no feasible less environmentally damaging alternative. The third test requires that feasible mitigation measures be provided to minimize the project's adverse environmental effects. Similarly, Section 30236 requires that any proposed substantial alteration of a river or stream may be allowed only if it is for one of the purposes enumerated in the policy, including improvement of fish and wildlife habitat, and if the proposed development incorporates the best mitigation measures feasible.

Allowable Use Test

The first test set forth above is that any proposed filling, diking, or dredging in wetlands must be for an allowable purpose as specified under Section 30233 of the Coastal Act. As described in Sections B and D and shown in the above tables (and as described in more detail below), the proposed diking and dredging activities are proposed to occur in existing seasonal wetland, stream channel and pond habitats for the purpose of restoring the internal tidal slough network and estuarine marsh plain habitats and brackish and freshwater pond habitat. This includes the PG&E Gas Line work which is necessary to facilitate restoration of the slough channel. Likewise, the proposed fill within agricultural grassland and golf course areas are necessary to eliminate the potential for fish stranding during high flow events, and critical to achieving project goals associated with improving habitat for salmonids and other fish species. The proposed restoration work is expected to provide extensive benefits to marine resources such as sensitive fish and estuarine plant species, and it will specifically provide needed critical habitat for listed salmonids and tidewater goby. Furthermore, **Special Condition 1** requires that the City monitor the restored areas to demonstrate that restoration is achieved. Thus, the Commission finds that the proposed restoration is consistent with the definition of restoration and constitutes filling and dredging for restoration purposes consistent with Section 30233(a)(6) and allowable substantial alteration of streams consistent with Coastal Act Section 30236 (3).

Alternatives

The second test set forth by the Commission's diking/dredging/filling policies is that the proposed diking/dredging/filling project must have no feasible less environmentally damaging alternative. In this case, the Commission has considered alternatives and determines that there are no feasible less environmentally damaging alternatives to the project as conditioned. Alternatives that have been identified include: (1) the "no project" alternative (2) Full tidal influence; and (3) Muted Tidal Influence without Channel Modification

"No Project" Alternative

The "no project" alternative would maintain the *status quo* of the lower Martin Slough ecosystem in its current degraded, dysfunctional condition with no comprehensive restorative actions to improve and restore its hydraulic and ecosystem functions. Although the "no project" alternative would avoid the short-term impacts related to hydrology, water quality, and biological resources associated with the proposed project, such non-action would fail to maintain and enhance marine resources and the biological productivity of coastal waters necessary to maintain healthy populations of marine organisms, as is mandated by the requirements of Coastal Act Sections 30230 and 30231. The "no project" alternative would not address the issues of the

continued degradation of marine resources, water quality, agricultural productivity, and flood hazard mitigation. Therefore, the no project alternative is not a less environmentally damaging alternative to the proposed project as conditioned.

Full tidal influence

This alternative would result in removal of the existing tide gates and the berm along Swain Slough, thus opening the majority of the project area to full tidal influence and allowing the ecosystem to transform back to its pre-development state. This alternative provided the maximum improvement for fish passage and fish access. However, full tidal exchange would also exacerbate inundation and flooding hazards, result in reduced improvements to water quality, sedimentation and wetland habitat availability and function. Furthermore, this alternative would result in further marginalization of adjacent agricultural areas through increased magnitude and duration of flooding. Although this alternative would provide stream and wetland restoration benefits, it would not result in the full suite of habitat benefits necessary to maintain and enhance marine resources consistent with the requirements of Sections 30230 and 30231 of the Coastal Act and maintain the agricultural production under Section 30241 of the Coastal Act. Therefore, this full tidal influence restoration alternative is not a feasible less environmentally damaging alternative to the proposed project as conditioned.

Muted Tidal Influence without Channel Modification

This alternative would result in the installation of new tide gates designed to create a muted tidal prism and facilitate fish passage, expansion of existing ponds and creation of new pond habitat. This alternative would result in many of the same benefits as the proposed project: improvement to fish access and passage, riparian habitat, water quality and brackish and freshwater wetland habitat. This alternative would also alleviate flooding and inundation impacts on existing agricultural and golf course areas. However, with the exception of improvements to wetland habitat through the expansion and creation of ponds, this alternative would provide a reduced benefit as compared to the proposed project. Without increasing the capacity of the Martin slough channel, the watershed would not be able to drain in a reasonable amount of time, leading to extensive inundation, scour, sedimentation and limited restoration benefit. Thus, this alternative would not achieve the desired level of restoration necessary to maintain and enhance marine resources and the biological productivity of coastal waters necessary to maintain healthy populations of marine organisms, as is mandated by the requirements of Coastal Act Sections 30230 and 30231. Therefore, this restoration alternative is not a feasible less environmentally damaging alternative to the proposed project as conditioned.

In addition to the project alternatives described above, the City considered alternatives for smaller project components. The locations of staging areas, access roads and temporary bridges have been designed and sized to minimize temporary impacts to wetlands. There are also no environmentally superior alternatives to PG&E's relocation of the 6-inch gas line. Proposed deepening of the Martin Slough channel will reduce the soil cover over the gas lines to less than PG&E's required minimum depth of coverage. PG&E proposes to bury the line deeper to achieve the required coverage and will conduct their work in the stream concurrently with the City's proposed in-channel work to minimize impacts from proposed excavation and dewatering of the slough. An alternative to burying the line deeper under the channel would be relocating the line to a different location. However, this would require excavation of a much larger area

and would result in significantly more adverse impacts due to the sensitive resources in the surrounding area, including creek, marsh, and riparian habitat as well as prime agriculture lands.

Thus, based on the above analysis, the Commission concludes that there are no feasible less environmentally damaging alternatives to the proposed project as conditioned.

Mitigation

The final test set forth by the above-cited policies is whether feasible mitigation measures have been provided to minimize adverse environmental effects. The proposed diking, dredging, and/or filling of coastal wetlands and waters will result in the conversion of approximately 16 acres of marginal seasonal wetlands found in agricultural and golf course areas to fully functioning freshwater/brackish marsh and seasonal/riparian wetland habitat. In addition, approximately 1.26 acres of existing seasonal wetlands, located in the agricultural pasture or golf course areas will be filled to improve drainage and to eliminate the possibility of fish stranding during high flow events. Finally, the proposed project has the potential to cause temporary adverse impacts to coastal resources including water quality impacts, impacts to sensitive fish and other aquatic resources in the project area, and impacts to sensitive plants and nesting birds in the project area.

As described above, the purpose of the proposed project is to restore the historic Martin Slough channel and associated tidal, brackish and freshwater marsh habitat to improve biological productivity and maintain healthy populations of aquatic and riparian species. Accordingly, the project design has limited filling and excavation of wetlands to those instances necessary for the overall restoration of the slough. Furthermore, as described above, the proposed project will result in approximately 20 acres of new or significantly restored stream, wetland and riparian habitat as well as improved tidal function, water quality, and flood capacity. These 20 acres and the re-introduction of a muted tidal regime will fully compensate for the “loss” of approximately 15 acres of marginal seasonal wetland habitat in agricultural and golf course areas as well as the 1.26 acres of fill required to avoid fish stranding in those areas. To ensure this compensation is achieved, **Special Condition 1** requires the City to implement a comprehensive monitoring plan that will evaluate the efficacy of the constructed project in relation to the project’s habitat goals.

To address potential temporary impacts associated with construction, the Commission has identified feasible mitigation measures that will minimize the adverse environmental effects of construction of the proposed project (see Sections D and E). These mitigation measures include implementation of: (1) an aquatic species relocation program to minimize impacts to fish and other aquatic organisms (**Special Condition 3**), (2) a Storm Water Pollution Prevention Plan that incorporates best management practices to reduce water quality and biological impacts associated with construction-related erosion and turbidity (**Special Condition 4**), (3) a Slough Dewatering and Diversion Plan to ensure proper disposal and discharge of turbid water during dewatering activities (**Special Condition 8**), (4) a Hazardous Materials Spill Prevention Control and Countermeasure Plan to minimize the risk of an accidental release of hazardous materials into the marine and riparian environment (**Special Condition 9**), and (5) measures to protect sensitive plants and nesting birds in the project area (**Special Conditions 11 and 12**). With these conditions incorporated, the proposed project provides adequate mitigation for both permanent

and temporary wetland impacts and thus, the Commission finds that the third test of Coastal Act section 30233(a), and the mitigation provisions of Coastal Act Section 30236 have been met.

For the reasons described above, the Commission finds the project, as conditioned, consistent with Coastal Act Sections 30233(a) and 30236.

H. PROTECTION OF AGRICULTURAL LANDS

Coastal Act Section 30241 states as follows:

The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the area's agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:

(a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.

(b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.

(c) By permitting the conversion of agricultural land surrounded by urban uses where the conversion of the land would be consistent with Section 30250.

(d) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.

(e) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.

(f) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivision (b), and all development adjacent to prime agricultural lands shall not diminish the productivity of such prime agricultural lands.

The referenced section of Coastal Act Section 30250 states as follows:

(a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.

Coastal Act Section 30242 states as follows:

All other lands suitable for agricultural use shall not be converted to nonagricultural uses unless (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.
[Emphasis added.]

In addition, Coastal Act Section 30250 requires consideration of the cumulative impacts of development (defined in Coastal Act Section 30105.5) as follows:

"Cumulatively" or "cumulative effect" means the incremental effects of an individual project shall be reviewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

Historical Context of Agriculture in Humboldt County and along Martin Slough

Humboldt County has a long history of coastal agriculture. Humboldt County has a total land area of approximately 2.3 million acres, and approximately one third of this land base (~690,000 acres) is directed to some type of agricultural use. Traditional agriculture in the county consists of grazing beef cattle on coastal rangeland; dairy cows on rich pasture bottomlands around Humboldt Bay; and row crops and orchards on terraced river floodplains. The high rainfall, deep, fertile soil, and marine climate make some of the County's agriculture land highly productive. Humboldt County agricultural products (excluding timber) had a market value of approximately \$197 million in 2013,¹ with the top four crops, by value, excluding timber, consisting of livestock (beef cattle, dairy cows, sheep, etc.), milk and milk products, nursery stock (cut flowers, ornamental tree production, etc.), and field crops (alfalfa, silage, range, etc.).

Much agricultural land in the coastal zone of Humboldt County occurs on historic tidal marsh. Humboldt Bay supported nearly 10,000 acres of intertidal coastal marsh. The lower Martin Slough watershed is part of the Humboldt Bay bottomlands that historically was subject to tidal inundation. It is also an example of reclaimed land subsequently used for agricultural production. Euro-American settlers diked and drained most of these marshes and sloughs in the delta for agricultural use beginning in the late 19th-century. Encouraged by federal land use policies, this approach enabled increased pasture and hay production on thousands of acres, many of which are still in agricultural production today.

Earthen levees were constructed along the margins of marsh plains to a height of about 3 to 4 feet above the marsh plain using locally excavated mud and tidegates were installed to enable the enclosed basins to drain at low tide. However, these actions disrupted the hydrology and hydraulics of the basins, leading to poor drainage, inundation for significant stretches of the rainy season, and increased vulnerability to storm events.

Episodic flooding has always been common along the lowland areas surrounding Humboldt Bay and the Elk River Estuary, of which Martin Slough is a part. However, residents of Pine Hill, farmers with land bordering the slough, and the City's municipal golf course are now severely impacted by increased chronic flooding and persistent ponding. What has changed over the past 25 years is that lands that used to drain after flooding no longer do so, or do so much more slowly. These conditions mean that grazing areas in the project area are frequently unusable due to flooding or saturation for days, weeks and sometimes longer between October through May, resulting in a significant loss in agricultural productivity. This is especially true of the agricultural lands immediately adjacent to Martin's Slough that are most prone to flooding and

¹ Humboldt County Department of Agriculture Crop Report 2013.

the least usable for agriculture. These are the areas that would be converted to stream, marsh or riparian habitat under the proposed project

Agricultural Lands within the Project Area

Coastal Act Section 30113 defines “*prime agricultural land*” through incorporation-by-reference of paragraphs (1) through (4) of Section 51201(c) of the California Government Code:

“Prime agricultural land entails land with any of the follow characteristics: (1) a rating as class I or class II in the Natural Resource Conservation Service land use capability classifications; or (2) a rating 80 through 100 in the Storie Index Rating; or (3) the ability to support livestock used for the production of food and fiber with an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture; or (4) the ability to normally yield in a commercial bearing period on an annual basis not less than two hundred dollars (\$200) per acre of unprocessed agricultural plant production of fruit- or nut-bearing trees, vines, bushes or crops which have a nonbearing period of less than five years.”

The four different prongs of the definition of “prime agricultural land” relate to the value and utility of the land in terms of range of agricultural uses and productivity. According to the definition provided above, approximately 30.4 acres of the total project area is classified as prime agricultural soils due to a Class I or Class II rating in the Soil Conservation Service Land Use capability classification and/or a high Storie Index rating (see [Exhibit 10](#)). These prime agricultural soils are located on the NRLT property in the lower watershed and on the Eureka Municipal Golf Course property in the upper watershed. The remaining pastureland on the NRLT property does not meet the definition of prime agricultural land cited above. This acreage does not have soils that meet the definition, and the grazing cattle the pasture supports (a feeder calf operation that can support one animal per acre for five to six months of the year) result in an animal unit per acre less than one.

The proposed project will result in the conversion of approximately 7.3 acres of prime agricultural soils and 2.6 acres of non-prime agricultural lands located adjacent to Martin’s Slough to salt marsh, riparian habitat, and brackish/freshwater marsh habitat for the purpose of restoration. 8.6 of these acres are located on the NRLT property (6 acres of prime and 2.6 acres of non-prime agricultural land) and 1.3 acres are located on the golf course property. The 1.3 acres of designated prime agricultural land within the golf course property has not been maintained in agricultural production since before 1957 when the golf course was constructed. This area is zoned as “public” by the City. As such, despite the presence of agricultural soils, golf course lands are not considered agricultural lands and are thus, not subject to Coastal Act Section 30241.

Prime Agricultural Lands

As cited above, Section 30241 requires that the maximum amount of prime agricultural land be maintained in agricultural production in order to maintain the agricultural economy of the area. Section 30241 requires that conflicts between urban and agricultural land uses be minimized through all of the following:

(a) Establishing Stable Boundaries Between Urban and Rural Uses

The project site is located along the southern boundary of the City of Eureka, bordering residential development to the north and west and mostly agricultural and timber lands to the south and east ([Exhibit 1](#)). The slough itself thus serves as a boundary between urban and rural areas. The proposed project will increase the footprint of the slough and expand the size of the buffer between the agricultural lands to the south and the residential areas to the north. Furthermore, one of the purposes of the proposed project is to alleviate flooding within the agricultural lands to the south. Decreased frequency and duration of flooding will increase the productivity and economic viability of the agricultural lands and thus, decrease the likelihood that they will be converted to residential or other urban uses for economic reasons.

Thus, given the project's location on the urban/rural boundary, development of the restoration project on the currently grazed portions of the site would serve to minimize conflicts between agricultural and urban land uses by establishing a stable boundary separating urban and rural areas, thereby providing a clearly defined buffer between potentially incompatible uses.

(b) Limiting Conversions Around Urban Periphery to Areas Already Compromised by Urban Uses

The proposed conversion of agricultural lands constitutes a conversion of agricultural land around the periphery of urban areas. These areas proposed for conversion are immediately adjacent to the slough and are subject to worst flooding within the project area, in part from urban uses in the surrounding watershed. As described earlier, the flooding and sedimentation in the lower watershed has several causes, one of which is increased stormwater flows and sediment fluxes from the residential areas and golf course in the upper watershed. As these areas developed, increased volumes of sediment and water were routed down the Martin Slough system, leading to aggradation of the channel and exacerbated flooding in the agricultural areas bordering the slough. Flooding renders agricultural lands within the project area, especially those adjacent to the banks of the slough, unusable for long stretches during the wet season, thus limiting the viability of these areas for grazing. Thus, the proposed project would result in the conversion of lands already compromised by conflicts with urban uses. Furthermore, the proposed project seeks to lessen this conflict by increasing the carrying capacity of the channel and facilitating improved conveyance of storm flows out of the system, thus improving the productivity and viability of the remaining agricultural areas.

(c) Allowing conversion of agricultural land consistent with Coastal Act Section 30250

Coastal Act Section 30250 requires that new residential, commercial or industrial development be located within, contiguous to, or in close proximity to existing development. The purpose of the proposed project is restoration and does not include any development that would be subject to Coastal Act Section 30250. Thus, the project is consistent with this provision.

(d) Develop Lands Not Suitable for Agriculture First Before Converting Agricultural Lands

The proposed conversion of 6 acres of prime grazing land around the periphery of an urban area would occur on land not particularly suited for agriculture use and whose development would avoid conversion of productive agricultural lands. As described above, regular flooding during

the winter months has led to decreased usability of the grazing areas in the project area, especially those lands immediately adjacent to the channel. According to the IS/MND, prolonged inundation decreases the nutritional value of the vegetation and decreases the economic value of the land. Furthermore, cows that do graze in these areas can destabilize stream banks through trampling or vegetation removal, thus exacerbating erosion and flooding problems in the slough, which further decreases the productivity of the land for agricultural uses. As a result, the lands immediately adjacent to the channel are designated as prime agricultural land, but due to their proximity to the slough, are not well-suited for agricultural use. The proposed conversion of these acres of poor functioning agricultural land would help alleviate flooding and improve the productivity and viability of the surrounding prime and non-prime agricultural lands.

Furthermore, the improvements necessary to achieve that benefit could not be achieved through a different design or by developing other non-agricultural areas within the watershed. Hydraulic modeling conducted for the Martin Slough Enhancement Feasibility Study assessed the expected flood flows and sediment loads that must be conveyed out of the system to alleviate flooding. The modeling results were used to optimize the proposed design for channel capacity and configuration to maximize the hydrologic benefit. Alternative designs were analyzed, but none provided a larger benefit to agricultural lands in the project area.

(e) Avoid Public Service Facility Expansion That Would Impair Viability of Agricultural Lands

The proposed project does not involve an extension of utility lines or other public services on the site or to adjacent agricultural lands. The PG&E gas line work will relocate an existing line but will not result in any change to the level of service provided by PG&E. Therefore, the proposed conversion of grazing lands would not result in the development of infrastructure that would be financed through assessments against the adjoining agricultural properties.

Furthermore, the proposed conversion of grazing lands, as part of the proposed habitat restoration and enhancement project as conditioned, would not result in emissions or discharges that would degrade air and water quality and thereby impact agricultural viability of the surrounding agricultural lands.

(f) Avoid Diminishment in Productivity Associated with Divisions of Prime Agricultural Land and Impacts from Adjacent Development

The proposed project does not involve a subdivision of prime agricultural lands. In addition, the proposed conversion would not diminish but instead, would enhance the productivity of the adjacent prime and non-prime agricultural lands.

Therefore, for all of the reasons stated above, the Commission finds the portion of the project involving the permanent loss of 6 acres of prime agricultural land in the project area is consistent with the provisions of Section 30241 cited above.

Non-prime Agricultural Lands

Coastal Act Section 30242 protects lands suitable for agricultural use that are not prime agricultural lands or agricultural lands on the periphery of urban areas from conversion to non-agricultural use unless continued agricultural use is not feasible, or such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. The proposed restoration project will convert approximately 2.6 acres of non-prime agricultural land for restoration purposes. Although the land is not considered prime, cattle grazing (though limited by seasonal inundation and general pasture quality) is the primary use on the subject site, and this use is proposed to continue on the project site in the future. Thus, continued agricultural use of the site is feasible. Nonetheless, the conversion is allowable because it is both necessary to preserve prime agricultural land in the surrounding area and compatible with continued agricultural use on surrounding lands.

Project implementation is expected to significantly reduce flooding duration on approximately 34 acres of mostly prime agricultural land on the NRLT property, thereby greatly enhancing its productivity. Implementation of the proposed project will alleviate chronic and economically damaging flooding while restoring and enhancing fish and wildlife habitat lost due to the ongoing aggradation of the historic Martin Slough channel. Flood alleviation will be achieved by expanding the capacity of the channel and converting 9.9 acres of prime and non-prime, low-productivity agricultural land along the channel to open water, marsh habitat and riparian habitat. The expanded channel capacity would improve sediment transport within the watershed, thus minimizing sediment accumulation in the channel and subsequent flooding of prime agricultural lands in the immediate vicinity. Another key attribute of the proposed project is that the duration of flooding and ponding will be significantly shortened. Hydraulic modeling completed for the Martin Slough Enhancement Feasibility Study that preceded and informed development of the proposed project, indicates that a 10-year rainfall event that currently results in inundation of the project area for over a week after peak rainfall, would, after project implementation, result in inundation of one to two days. Thus, the proposed project provides the dual benefits of increasing drainage capacity in a hydraulically dysfunctional area while also providing substantial habitat improvements and enhancements to agricultural productivity in the surrounding area.

Section 30242 of the Coastal Act also requires that conversion of non-prime agricultural land be compatible with continued agricultural use on surrounding lands. As discussed above, the agricultural viability of this area as well as the surrounding region deteriorates each year due to continuing aggradation and increased ponding of water within and outside of the project footprint. The economic viability and social fabric of the area's agricultural economy have been strained by these conditions. As described above, the proposed project will reverse this trend by converting those areas least capable of providing relatively high levels of agricultural productivity, and improving agricultural productivity in the surrounding areas. By reducing the frequency and duration of flooding on land adjacent to and nearby the project footprint, the proposed project will increase the area's capacity to support livestock, reduce flooding risk to homes and infrastructure, improve water quality, and improve recreational opportunities on the City's golf course. Moreover, protection of agricultural lands from chronic flooding will enable operators to invest more reliably and protect investments in such things as fences, barns, dairy waste tanks, and other costly items that are designed to achieve energy savings, increase operational efficiency, and improve water quality. Reducing flooding by restoring historic

habitats and improving drainage also will reduce economic impacts to producers from annual pumping, farming and seeding, decrease emission of greenhouse gases such as methane, and reduce energy consumption in the region. Thus, the proposed project will protect and restore the agricultural productivity of the area and protect and enhance the area's agricultural economy.

Therefore, for the reasons described above, the Commission concludes that the portion of the project involving the conversion of 2.6 acres of non-prime agricultural land in the project area is necessary to preserve prime agricultural land in the surrounding area and is compatible with continued agricultural use on surrounding lands and thus is permissible under Section 30242 of the Coastal Act.

Conclusion:

For the reasons described above, the Commission finds that the proposed conversion of prime and non-prime agricultural lands to open water, marsh and riparian habitat is consistent with Sections 30241 and 30242 of the Coastal Act.

I. HAZARDS

Section 30253 of the Coastal Act states, in applicable part, as follows:

New development shall do all of the following:

- (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
- (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs...*

The project site is located in an area of high geologic and flood hazards. The area is diked former tidelands that could become unstable during saturated soil conditions and a ground-shaking event. In addition to geologic hazards, flooding and associated geomorphic processes are natural components of the Martin's Slough system. The entire project area lies within FEMA's 100-year flood zone. Flooding along the slough has increased in recent decades due to geomorphic changes previously discussed that have reduced the capacity of the slough channel to convey runoff. In addition, the reduction in floodwater drainage and sediment scour/transport through the slough has contributed to excessive accumulation over the past century.

Section 30253 of the Coastal Act requires that new development in hazard areas minimize risks to life and property. The policy further requires that new development assure stability and structural integrity and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area. The channel restoration component has been designed to convey significantly larger volumes of water without increasing flood hazards on adjacent parcels to a higher degree than currently occurs. The restored channel will convey flood waters and allow for the more rapid draining of flooded parcels bordering the slough, thus decreasing the risk to life and property from flood hazards. In addition, the proposed repairs to the Swain Slough berm will decrease the risk of overtopping along the western edge of the Vroman and NRLT properties, leading to a reduced flood risk to the agricultural areas on these

properties. Proposed infrastructure, including new bridges and culverts have been designed to withstand seismic shaking and increased flood flows expected due to the proposed increase in channel capacity.

In addition to minimizing flooding and seismic risks, the proposed project incorporates various measures to ensure that it does not contribute significantly to erosion. Channel slopes and other temporary or permanent excavation areas have been designed to minimize erosion. For example, any cut slope higher than four feet or where groundwater seepage may be present will be limited to a slope of 1.5:1. In addition, the project plans also call for the use of bioengineering methods (e.g., planting of specific vegetation and/or the installation of large-wood structures) as necessary to stabilize bank erosion both on tributaries and the main slough channel. Furthermore, the project is designed to accommodate the increased tidal prism created through the proposed restoration so that no additional channel expansion is anticipated. Tidal energy is expected to maintain the construction channel geometry by transporting sediments introduced from the upper watershed or downstream estuary, but the reintroduction of tidal exchange to the area is not designed to impart enough change or energy to increase erosion in any portion of the excavated channel. To further ensure that project-related erosion is minimized, **Special Condition 4** requires the City to submit a SWPPP to the Executive Director that incorporates Best Management Practices such as use of silt curtains or fences, control of sediment sources (i.e., stockpiles), and use of stabilization techniques (i.e., geotextile mats, vegetation seeding) during construction to reduce project-related erosion.

Even though the project has been designed to minimize risks associated with geologic and flood hazards, some risk remains. The entire project area is located within the FEMA-mapped 100-year floodplain of Martin Slough and the Elk River, and there is no way to avoid the risk of a large magnitude flood event in the future. Given that the applicant has chosen to implement the project despite the identified geologic and flooding risks in the area, the applicant must assume the risks. Therefore, the Commission attaches **Special Condition 13**, which notifies the applicant that the Commission is not liable for damage as a result of approving the permit for development. The condition also requires the applicant to indemnify the Commission in the event that third parties bring an action against the Commission as a result of the failure of the development to withstand the hazards.

As conditioned as discussed above, the Commission finds the proposed new development is consistent with Section 30253 of the Coastal Act.

J. PROTECTION OF ARCHAEOLOGICAL AND CULTURAL RESOURCES

Section 30244 of the Coastal Act states as follows:

Where development would adversely impact archeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

Historic and cultural resources are places or objects that possess historical, cultural, archaeological or paleontological significance and include sites, structures, or objects significantly associated with, or representative of earlier people, cultures and human activities

and events. Project-related activities have the potential to disturb or damage Native American artifacts or other historic or archeologic sites of potential cultural resources value. Disturbance of surface and subsurface soils could directly destroy a previously unrecorded historic or archaeological resource, including human remains, or disrupt the site such that the historic or archaeological context of the resource is altered adversely.

Both the County and the Applicant conducted cultural resource assessments to identify potential resources that could be affected by the proposed project. The County's study included a literature search, an intensive field survey, interviews with local residents and Native American Representatives, and an evaluation of the significance of identified cultural resources. This study found no significant prehistoric cultural resources or known and recorded archeological properties within the proposed project's area of direct impact. In addition, the Applicant conducted a consultation with the local Tribal Historic Preservation Officers (THPOs) for the Wiyot Tribe, Rohnerville Rancheria, Blue Lake Rancheria and the Yurok Tribe. The two THPOs that responded confirmed the results of the cultural resource studies and stated that the proposed project will not result in impacts to tribal resources.

Although no known cultural resources were identified in the project area, the potential exists for previously unrecorded cultural resources to be located within the project area. To ensure protection of any archaeological or cultural resources that may be discovered at the site during construction of the proposed project, the Commission attaches **Special Condition 14**. This condition requires the following (a) prior to initiating ground disturbance work, the Applicant shall hold a pre-construction meeting with the field crew and a THPO, (b) prior to initiating ground disturbance work, the Applicant will notify THPOs to allow the THPOs to spot check digging activities, and (c) during all construction phases, the Applicant shall implement an inadvertent archeological discovery protocol that requires immediate stoppage of work, notification of THPOs and other appropriate entities and retention of a qualified archeologist to evaluate any find. With these measures in place, impacts to cultural resources will be minimized.

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Coastal Act Section 30244, as the development will include mitigation measures to ensure that the development will not adversely impact archaeological resources.

K. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096 of the Commission's Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit amendment, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

Humboldt County, acting as lead CEQA agency, is scheduled to act on certification of the Mitigated Negative Declaration on June 1, 2017.

The proposed development has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. Mitigation measures, including conditions addressing marine resources, dredge and fill of coastal waters, water quality, and cultural resources will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project is the least environmentally-damaging feasible alternative and is consistent with the requirements of the Coastal Act to conform to CEQA.

L. FEDERAL CONSISTENCY

The Commission's action in this case authorizes both a CDP for the proposed project and results in a conditional concurrence with the City's federal consistency certification. In the case of a conditional concurrence with a consistency certification, the following procedures are triggered under the federal consistency regulations (15 CFR Part 930):

930.4 Conditional Concurrences.

(a) Federal agencies, applicants, persons and applicant agencies should cooperate with State agencies to develop conditions that, if agreed to during the State agency's consistency review period and included in a Federal agency's ...approval under subparts D [or] E ... of this part, would allow the State agency to concur with the federal action. If instead a State agency issues a conditional concurrence:

(1) The State agency shall include in its concurrence letter the conditions which must be satisfied, an explanation of why the conditions are necessary to ensure consistency with specific enforceable policies of the management program, and an identification of the specific enforceable policies. The State agency's concurrence letter shall also inform the parties that if the requirements of paragraphs (a)(1) through (3) of the section are not met, then all parties shall treat the State agency's conditional concurrence letter as an objection pursuant to the applicable Subpart and notify, pursuant to §930.63(e), applicants, persons and applicant agencies of the opportunity to appeal the State agency's objection to the Secretary of Commerce within 30 days after receipt of the State agency's conditional concurrence/objection or 30 days after receiving notice from the Federal agency that the application will not be approved as amended by the State agency's conditions; and

(2) The ... applicant (for Subparts D and I), ... shall modify the applicable plan, project proposal, or application to the Federal agency pursuant to the State agency's conditions. The Federal agency, applicant, person or applicant agency shall immediately notify the State agency if the State agency's conditions are not acceptable; and

(3) The Federal agency (for Subparts D, E, F and I) shall approve the amended application (with the State agency's conditions). The Federal agency shall immediately notify the State agency and applicant or applicant agency if the Federal agency will not approve the application as amended by the State agency's conditions.

(b) If the requirements of paragraphs (a)(1) through (3) of this section are not met, then all parties shall treat the State agency's conditional concurrence as an objection pursuant to the applicable Subpart.

Right of Appeal.

Pursuant to subsection (a)(1) quoted in the prior section and Subpart H of the federal consistency regulations, within 30 days from receipt of notice of a Commission conditional concurrence to which the the City of Eureka does not agree, the City may request that the Secretary of Commerce override this objection. 15 CFR §§ 930.4(a)(1) & 930.125(a). In order to grant an override request, the Secretary must find that the proposed activity for which the City submitted a consistency certification is consistent with the objectives or purposes of the Coastal Zone Management Act, or is necessary in the interest of national security. A copy of the request and supporting information must be sent to the California Coastal Commission and U.S. Army Corps of Engineers. The Secretary may collect fees from the City for administering and processing its request. [Note: This right of appeal does not apply to the CDP, but only to the activity authorized under the consistency certification.]

APPENDIX A: SUBSTANTIVE FILE DOCUMENTS

Coastal Development Permit Application and Federal Consistency Certification Materials:

Application for Coastal Development Permit 1-16-1110, dated December 2016.

Martin Slough Enhancement Project Monitoring Plan, August 2013, Revised December 2016.

Response to Notice of Incompleteness, submitted March 29, April 17, April 25, April 27, and May 2, 2017.

Consistency Certification CC-0001-16, dated April 29, 2016.

An Archaeological Survey Report for the Martin Slough Restoration Project, Eureka, Humboldt County, dated May 2017.

Updated Wetland Delineation for the Martin Slough Restoration Project, Eureka, Humboldt County, dated February 2017

Environmental Documents:

Humboldt County, *Draft IS/MND for the Martin Slough Enhancement Project*, April 28, 2017.

Table 1. Current and Projected Habitat Types in Project Area Associated with Various Proposed Project Activities

| Habitat Type | Current Area (ac) | Projected Area after Project Implementation (ac) | Proposed Project Activity to Increase/Decrease Habitat Type |
|---|--------------------------|---|---|
| Aquatic | 1.6 | 2.7 | Widening and adding depth to the channel, pond expansion and creation |
| Riparian scrub/forest/seasonal wetland | 0.5 | 9.3 | Planting of vegetation throughout project area |
| Salt marsh | 2.5 | 5.6 | Creation of Marsh Plain A and B |
| Freshwater/Brackish marsh | 0.4 | 2.4 | Creation of riparian edge habitat associated with Ponds C, E and the Southeast Tributary pond, and the expansion of Ponds D, F and G. |
| Agricultural grassland/seasonal wetland | 43 | 35.6 | Approximately 7.4 acres of seasonal wetland/pasture will be converted to salt marsh and freshwater/brackish marsh due to the creation of Marsh Plains A and B, Pond C and the Southeast Tributary pond. |
| Golf course grassland/seasonal wetland | 73.0 | 65.4 | Approximately 7.6 acres of golf course grassland/seasonal wetland will be converted to freshwater/brackish marsh and riparian/scrub forest through channel expansion, pond creation and riparian vegetation planting. |
| Total | 121.0 | 121.0 | |

Table 2: Cut and Fill Volumes by Project Phase and Location.

| CUT VOLUMES | | | | FILL VOLUMES | | |
|--------------------------------------|--------------|---|-------|--------------------------------------|--------------|-------|
| Location | Cut Vol. | Disposal Area | Phase | Location | Fill Vol. | Phase |
| NRLT property | | | | | | |
| Marsh Plain A + MS 0+00 to 9+50 | 4,545 | Swain Slough Berm, White Slough, &/ or other permitted site | 2 | Swain Slough Berm | 125 | 2 |
| Southeast Trib. & Pond | 2,150 | Around Barn, White Slough, &/ or other permitted site | 2 | Around barn | 520 | 2 |
| MS 9+80 6" gas line relocate | 311 | Re-fill trench | 2 | MS 9+80 6" gas line relocate | 311 | 2 |
| subtotal - Ph. 2 Exc. | 7,006 | | | subtotal - Ph. 2 Fill | 956 | |
| | | | | subtotal - Ph. 2 off-haul | 6,050 | |
| North Fork & Pond G | 3,864 | 610 in old NF channel; 3,254 to GC 3rd, 4th , 7th fairways | 3 | North Fork | 610 | 3 |
| | | | | Golf course | 3,254 | 3 |
| subtotal - Ph 3 Exc. | 3,864 | | | subtotal - Ph 3 fill | 3,864 | |
| MS 9+50 to 30+50 and meander channel | 7,414 | 239 CY to MS 10+50 to 12+30 Channel; 517 CY to MS 13+80 to 15+80; 1,459 to MS 16+50 to 20+50; 5,199 to White Slough or other permitted location | 4 | MS 10+50 to 12+30 Channel (NRLT) | 239 | 4 |
| Marsh Plain B | 6,319 | White Slough or other permitted location | 4 | MS 13+80 to 15+80 Channel (NRLT) | 517 | 4 |
| | | | | MS 16+50 to 20+50 | 1,459 | 4 |
| 12" Gas Line Scour Protection (NRLT) | 10 | Re-fill trench | 4 | 12" Gas Line Scour Protection (NRLT) | 10 | 4 |

| | | | | | | |
|--|---------------|---|---|--|---------------|---|
| Pond C | 12,634 | White Slough or other permitted location | 4 | | | |
| subtotal - Ph 4 Exc. | 26,377 | | | subtotal - Ph 4 fill | 2,225 | |
| | | | | subtotal - Ph 4 off-haul | 24,152 | |
| Total Excavation Volume for NRLT property | 33,383 | | | Total Fill Volume for NRLT property | 3,181 | |
| | | | | Total Off-Haul for NRLT Property | 30,202 | |
| City Property | | | | | | |
| MS 30+50 to 46+00 | 3,478 | 3,015 to GC 14th & 17th fairways; 463 to White Slough or other permitted location | 5 | Golf Course | 2,418 | 5 |
| East Trib & Pond D | 2,378 | White Slough or other permitted location | 5 | Golf Course | 597 | 5 |
| 12" Gas Line Scour Protection (City) | 10 | Re-fill trench | 5 | 12" Gas Line Scour Protection (NRLT) | 10 | 5 |
| Pond E | 5,797 | White Slough or other permitted location | 5 | | | |
| subtotal - Ph 5 exc. | 11,663 | | | subtotal - Ph 5 fill | 3,025 | |
| | | | | subtotal - Ph 5 off-haul | 8,638 | |
| Pond F | 12,634 | White Slough or other permitted location | 6 | | | |
| MS 46+00 to 62+80 | 3,478 | White Slough or other permitted location | 6 | | | |
| subtotal - Ph 6 Exc. | 16,112 | | | subtotal - Ph 6 fill | 0 | |
| | | | | subtotal - Ph 6 off-haul | 16,112 | |
| Total Excavation Volume for City Property | 31,639 | | | Total Fill Volume for City | 6,889 | |
| | | | | Total off-haul for City | 24,750 | |

| | | | | | | |
|--|---------------|--|--|--|---------------|--|
| | | | | Total Fill Volume for NRLT & City | 10,070 | |
| TOTAL EXCAVATION VOLUME NRLT + CITY | 65,022 | | | TOTAL OFF- HAUL NRLT & City | 54,952 | |