

Humboldt Bay Trail South Project

Environmental Commitment Record

Project Name	Humboldt Bay Trail South Project	Federal Project No.	xxxx	
Contact	Hank Seeman, 707-445-7741	County Project No.	xxxx	

Project Description: *The Humboldt County Department of Public Works (County) is proposing to construct a Class I multi-use recreational trail between Bracut and the City of Eureka, Humboldt County, California. The Humboldt Bay Trail South Project (project) would provide the interconnecting link between two recently constructed segments of the larger Humboldt Bay Trail system (the City of Arcata's Bay Trail North and the City of Eureka's Waterfront Trail). The proposed project would be aligned in or adjacent to the currently unused North Coast Railroad Authority (NCRA) railroad corridor that follows the Humboldt Bay coastline immediately west of U.S. Highway 101 (Highway 101).*

NOTE: This following table is intended as a summary guide to environmental commitments and is meant to be a living document. Much of the information presented was gathered during the CEQA and NES process prior to the issuance of regulatory permits. It does not replace or supersede any environmental commitments made in technical studies or correspondence prior to NEPA clearance. If there are any discrepancies between this table and technical studies/permits then the technical studies/permits will take precedence. Typically, environmental commitments related to regulatory permits will be added to the table once the permits are authorized.

PERMITS REQUIRED	Agency	Permit Number	Date of Permit	Project Component
Section 7 ESA; Biological Opinion(s)	NMFS/USFWS			Entire Corridor
Section 404 Individual Permit	USACE			Wetlands and waters
Section 401 Water Quality Certification	RWQCB			Wetlands and waters
Section 1602 Streambed Alteration Agreement	CDFW			Wetlands and waters
Coastal Development Permit	California Coastal Commission			Entire Corridor

Task and Brief Description	Document	Timing/ Phase	Actions to Comply with Task	Task Completion	
				Initial	Date
Humboldt Bay Trail South					
Condition #1 - Special Status Plants					

<p>The County of Humboldt shall implement the following avoidance and protection measures for special-status plants:</p> <p>1. Due to the mobility and fluctuation of populations of Humboldt Bay owl's-clover, and Point Reyes bird's beak specifically, seasonally appropriate pre-construction surveys shall occur approximately one year prior to construction within the planned area of disturbance for the project, during the appropriate blooming time (spring or summer) for the target species. Impacts to special-status annual salt marsh plants such as Humboldt Bay owl's-clover, Point Reyes bird's beak, and western sand spurrey shall be avoided to the extent feasible. If these plants occur within the project footprint, and permanent impacts cannot be avoided, they shall be conserved through re-seeding (by hand, by a qualified biologist) into suitable habitat in the immediate project area. Seed will be collected in the late summer or early fall the year before construction when seeds from each target species are mature. Seed will be stored and spread post project construction in the best possible suitable habitat, near areas where impacts have occurred. Seeds should be spread in high elevation tidal marsh environments in the vicinity of salt grass if possible for Point Reyes bird's beak and near other native high salt marsh species, and in areas where invasive cordgrass is absent or sparse.</p> <p>2. If future pre-construction surveys determine that other special-status species are present within the project footprint, these plants will also be avoided to the extent feasible, and if not feasible, they shall be conserved by measures appropriate for the individual species which may include methods such as plant relocation, seed collection, and/or nursery plant propagation.</p> <p>3. Pre-construction surveys will also be performed within the planned area of disturbance, less than seven days prior to ground disturbance within habitat appropriate for Humboldt Bay owl's-clover, Point Reyes bird's beak and western sand spurrey. At this time any newly identified impacts to special-status plant species within the planned area of disturbance that cannot be feasibly avoided will be quantified and mapped. In the event that mature seed is available for Humboldt Bay owl's-clover, Point Reyes bird's beak and western sand spurrey and plants cannot be feasibly avoided, the seed will be collected, stored, and spread post construction and as described in this mitigation measure. All special-status plant species found at this time within the planned area of disturbance, but outside the trail footprint will be flagged for avoidance during construction.</p> <p>4. Any plants that could not be feasibly avoided and that will be impacted will be mapped, and the number of individuals documented prior to construction. The approximate quantity of seed collected from these plants and the dates the seed was collected and spread will also be reported. No monitoring is proposed for the seeded areas as assessing the success of these areas is impractical given the mobility of seeds in the tidally influenced salt marsh environment.</p> <p>5. Any seed mixes or other vegetative material used for re-vegetation of disturbed sites will consist of locally adapted native plant materials to the extent practicable.</p>	<p>CEQA MMRP, NES</p>	<p>Pre- and During Construction</p>	<p>The County will schedule pre-construction surveys one year prior to construction. If sensitive plants cannot be avoided, arrangements will be made to collect seed</p>		
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Condition #2 - Fish Avoidance

<p>The County of Humboldt shall implement the following avoidance and protection measures for ESA-listed and other special-status fishes:</p> <ol style="list-style-type: none"> 1. Prior to complete dewatering of any in-channel or in-bay work areas, coffer dams or barrier nets shall be placed to block off the area. Any fish remaining inside the coffer dams or barriers will be carefully removed by a qualified biologist. In order to minimize potentially adverse effects to aquatic organisms, all translocation/removal of fishes will be conducted by qualified fisheries biologists. Any fish that cannot be herded by seines from the work areas and must be physically handled will be immediately released in suitable habitat away from the action area, with comparable habitat and water quality conditions. Immediately following completion of in-channel or in-bay work, any cofferdams or block nets will be removed allowing free fish passage through the project area during the remainder of the construction period. 2. To minimize the potential hydroacoustic effects on fish of driving piles for bridge footings in and adjacent to tidally influenced stream/slough channels ("in-channel") and on intertidal mudflat areas ("in-bay"), a vibratory driver will be used to the maximum extent practicable. It is anticipated that piles would need to be proofed by driving the final 5 feet with an impact hammer to achieve design tip elevation and to verify load capacity. 3. To protect the most vulnerable life stages of sensitive fish species that occur within the action area, all in-channel and in-bay work will be restricted to the period between July 1 and September 31. This seasonal work window correlates to the period of the year when sensitive fish species are least likely to occur in the action area. To further reduce the potential for hydroacoustic effects on fish potentially occurring in the action area, all pile driving, using either vibratory or impact hammers, of piles placed in-channel and in-bay mudflat areas will be scheduled to occur between the latter 2-hours of outgoing tides and beginning 2-hours of incoming tides, when tidal inundation of work areas is minimal and so that all pile driving will occur out of the water. 	<p>CEQA MMRP, BA</p>	<p>Construction</p>	<p>The County will identify a qualified biologist with necessary permits or permissions and make arrangements to have the biologist present during coffer dam installation and to have fish relocated if present.</p>		
<p>Condition #3 - Tidewater Goby</p>					
<p>The County of Humboldt shall implement the following avoidance and minimization measures for tidewater goby:</p> <ol style="list-style-type: none"> 1. To avoid crushing adult gobies and their breeding burrows, no construction equipment will operate within potential goby habitat and no workers shall walk within the wetted channel in potential goby habitat areas. 2. To avoid barotrauma injury to gobies or damage to breeding burrows, no impact or vibratory equipment shall be used within an active, wetted channel in or contiguous with potential goby habitat or in any location where it could have an adverse effect on breeding burrows and gobies. In addition, heavy equipment used outside the wetted channel, must be operated at a distance as far as possible from suitable breeding habitat to avoid barotrauma injury and/or damage to goby breeding burrows. 3. No pile driving is permitted in the wetted channel within potential goby habitat. 4. New access roads must not enter a wetted channel or watercourse within potential goby habitat. 	<p>CEQA MMRP, NES, BA</p>	<p>Construction</p>	<p>Contractor will comply with avoidance measures.</p>		
<p>Condition #4 - Northern Red-legged Frog</p>					

<p>The County of Humboldt shall implement the following avoidance and minimization measures for northern red-legged frogs:</p> <ol style="list-style-type: none"> 1. Construction in waterways and wetlands with standing water shall be limited to the period of the year between July 1 and October 30 to avoid disturbance to breeding northern red-legged frogs. 2. No more than one week prior to commencement of ground disturbance within 50 feet of suitable northern red-legged frog habitat, a qualified wildlife biologist shall perform a preconstruction survey for the northern red-legged frog and shall relocate any specimens that occur within the work -impact zone to nearby suitable habitat. 3. In the event that a northern-red legged frog is observed in an active construction zone, the contractor shall halt construction activities in the area where observed and the frogs shall be moved to a safe location in similar habitat outside of the construction zone. 	<p>CEQA MMRP, NES</p>	<p>Pre- and During Construction</p>	<p>The County will arrange for a qualified biologist to conduct a survey immediately prior to construction.</p>		
<p>Condition #5 - Nesting Birds</p>					
<p>The County of Humboldt shall implement the following measures to ensure no significant impacts to native migratory bird species:</p> <ol style="list-style-type: none"> 1. The County will attempt to remove trees and other vegetation that could potentially contain nesting birds outside the bird nesting season (March 15 to August 15). If vegetation removal occurs outside the bird nesting season, no further mitigation is necessary. If vegetation removal occurs between March 15 and August 15, the County shall have a qualified wildlife biologist conduct preconstruction surveys within the vicinity of the impact area, to check for nesting activity of native birds and to evaluate the site for special-status bird species such as Little Willow Flycatcher and White-tailed Kites. The biologist shall conduct a minimum of one preconstruction survey within the seven-day period prior to vegetation removal activities. If vegetation removal work lapses for seven days or longer during the nesting season, a qualified biologist shall conduct a supplemental avian survey before project work is reinitiated. 2. If an active nest is found, the biologist will determine the extent of an appropriate construction-free buffer zone to be established around the nest and/or operational restrictions in consultation with the California Department of Fish and Wildlife. Buffer zones will be delineated with flagging and maintained until the nests have fledged or nesting activity has ceased. Buffer sizes would take into account factors such as (1) highway and other ambient noise levels, (2) distance from the nest to the highway and distance from the nest to the active construction area, (3) noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity; (4) distance and amount of vegetation or other screening between the construction site and the nest; and (5) sensitivity of individual nesting species and behaviors of the nesting birds. 	<p>CEQA MMRP, NES</p>	<p>Pre- and During Construction</p>	<p>To the extent practical, the County will remove trees and other vegetation outside of the nesting bird season. If removal must occur during nesting season, then the specified survey and avoidance measures shall be followed.</p>		
<p>Condition #6 - White-tailed Kite/Raptor Avoidance</p>					

<p>The following measures are recommended to avoid or minimize the potential for project-related impacts to raptor species including white-tailed kite: Pre-construction surveys for nesting raptors shall be conducted by a qualified biologist within the BSA and a 500-ft buffer around the BSA to ensure that no nests will be disturbed during project implementation. These surveys shall be conducted no more than 7 days prior to the initiation of construction activities, or re-initiation of construction activities if they have ceased for more than 7 days. During this survey, the biologist should inspect all trees immediately adjacent to the impact areas for raptor nests. If an active raptor nest is found close enough (i.e., within 500 feet) to the construction area to be disturbed by these activities, the biologist (in consultation with the CDFW) would determine the extent of a construction-free buffer zone to be established around the nest. The County will inform Caltrans when such an activity occurs. If all necessary approvals have been obtained, potential nesting substrate (e.g., shrubs and trees) that will be removed by the project should be removed before the onset of the nesting season (January through August), if practicable. This will help preclude nesting and substantially decrease the likelihood of direct impacts. If vegetation is to be removed by the Project and all necessary approvals have been obtained, potential nesting substrate (e.g., trees) that will be removed may be removed between September and February (i.e., outside of the nesting season) to help preclude nesting.</p>	NES	Pre- and During Construction	To the extent practical, the County will remove trees and other vegetation outside of the nesting bird season. If removal must occur during nesting season, then the specified survey and avoidance measures shall be followed.		
Condition #7 - Wetlands Avoidance					
<p>The County of Humboldt shall implement the following avoidance and protection measures for Waters of the United States and Waters of the State:</p> <ol style="list-style-type: none"> 1. The County shall attempt to avoid or minimize impacts to wetlands/waters to the greatest extent feasible in the final design plans. 2. Areas where wetland and upland vegetation are to be removed shall be clearly identified in the construction documents and reviewed by the County prior to issuing for bid. 3. Within 10 days of completion of construction in those areas where subsequent ground disturbance will not occur for 10 calendar days or more, disturbed areas shall be temporarily stabilized to reduce the potential for short-term erosion. Prior to a rain event or when there is a greater than 50 percent possibility of rain within the next 24 hours, as forecasted by the National Weather Service, appropriate BMPs will be installed upon completion of the day's activities to control erosion and prevent sediment laden stormwater from leaving the construction area. 4. Suitable perimeter control BMPs, such as silt fences, or straw wattles shall be placed below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These BMPs shall be installed prior to any clearing or grading activities. 5. If spoil (or stockpile) sites are used, they shall be located such that they do not drain directly into a surface water feature, if possible. If a spoil site drains into a surface water feature, swales shall be constructed to intercept sediment before it reaches the feature. Spoil sites shall be graded and vegetated to reduce the potential for erosion. 6. Sediment control measures shall be in place prior to the onset of the rainy season and will be monitored and maintained in good working condition until disturbed areas have been revegetated. 	CEQA MMRP	Pre-construction	The County shall ensure that the contractor complies with avoidance and protection measures.		

<p>7. A site-specific spill prevention plan shall be implemented for potentially hazardous materials. The plan shall include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms shall be constructed to prevent spilled materials from reaching surface water features.</p> <p>8. Equipment and hazardous materials shall be stored 50 feet away from surface water features.</p>					
Condition #8 - Wetlands Mitigation					
<p>The County shall compensate for wetlands impacts through restoration, rehabilitation, and/or creation of wetlands. If the wetland mitigation project being led by Caltrans on the Lanphere Parcel in the Arcata Bottoms does not have sufficient capacity to fully compensate for the Humboldt Bay South project's wetland impacts, then the County will identify an alternative site and develop a specific plan for that property to create the necessary wetland amount. A Wetlands Mitigation and Monitoring Plan shall be prepared in coordination with the USACE, NCRWQCB, CCC, and CDFW. Compensation for wetlands shall occur so there is no net loss of wetland habitat. Mitigation ratios will be determined in consultation with the USACE, NCRWQCB, CCC, and CDFW.</p> <p>The Wetland Mitigation and Monitoring Plan shall include the following elements: proposed mitigation ratios; description and size of the restoration or compensatory area; site preparation and design; plant species; planting design and techniques; maintenance activities; plant storage; irrigation requirements; success criteria; monitoring schedule; and remedial measures. The Plan shall be implemented by the County</p>	CEQA MMRP, NES	Pre, During, and Post Construction	It is anticipated that more detailed mitigation requirements will result from the USACE section 404 permit process. The County will be responsible for complying with the general requirements here and with any more specific requirements agreed to as part of the 404/401 process.		
Condition #9 - Protect Archaeological Resources					
<p>If cultural materials such as chipped or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 20 meters (66 feet) of the discovery. Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials and offered recommendations for further action. If the find is determined to constitute either an historical resource or a unique archaeological resource per CEQA Guidelines sections 15064.5, the archaeologist shall develop appropriate mitigation to protect the integrity of the resource and ensure that no additional resources are affected. Mitigation could include but would not necessarily be limited to avoidance, preservation in place, archival research, subsurface testing, or excavation and data recovery.</p>	CEQA MMRP	Construction;	The contractor will be responsible for day to day compliance with this measure. If resources are encountered and work is stopped in the area of the find, then the County shall determine the appropriate course of action in compliance with the measure.		
Condition #10 - Protect Human Remains					
<p>The County's contractor shall immediately notify the Humboldt County Coroner should human remains, associated grave goods, or items of cultural patrimony be encountered during construction, and the following procedures shall be followed as required by Public Resources Code § 5097.9 and Health and Safety Code § 7050.5. In the event of the coroner's determination that the human remains are Native American, the Native American Heritage Commission would be contacted and would appoint a Most Likely Descendant (MLD). A qualified archaeologist, the County and the MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects. The agreement would take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, and final disposition of the human remains and associated or unassociated funerary objects.</p>	CEQA MMRP	Construction	The contractor will be responsible for day to day compliance with this measure. If resources are encountered and work is stopped in the area of the find, then the County shall determine the appropriate course of action in compliance with the measure.		
Condition #11 - Unknown Hazardous Materials					

<p>In the event any hazardous, toxic, noxious, objectionable, or unknown chemicals are encountered during trail construction, construction shall be halted by the construction crew on duty and reported to the general contractor for the project and the County of Humboldt. Prior to resuming any work the County shall be responsible for obtaining a soil sample for analysis. The findings of the analysis shall be submitted, as applicable, to the North Coast Regional Water Quality Control Board (NCRWQCB) and any other appropriate regulatory agencies. Work shall not continue until and unless written approval is obtained from these agencies. The County shall comply at all times with the requirements and regulations of the NCRWQCB and other appropriate regulatory agencies with regard to the handling, transport, and disposal of hazardous materials such as contaminated soils to the satisfaction of these agencies. Disposal of all hazardous materials would be in compliance with all applicable California hazardous waste disposal laws.</p> <p>Construction specifications will include the following measures to reduce potential impacts to vegetation and aquatic habitat resources in the project area associated with accidental spills of pollutants (e.g. fuel, oil, and grease).</p>	CEQA MMRP	Construction	The contractor will be responsible for day to day compliance with this measure. If a spill occurs, once stabilized the County shall determine the appropriate course of action in compliance with the measure.		
Condition #12 - Preliminary Site Inspection					
<p>The County shall ensure that in areas of ground disturbance, a Preliminary Site Investigation (PSI) that includes pre-construction soil borings is conducted prior to finalization of plans/specifications in order to characterize soil and groundwater in anticipation of implementation of construction activities. Once the areas of ground disturbance and potential dewatering are confirmed, the PSI Workplan shall identify potential contaminants of concern for laboratory analysis, location, and number of borings necessary for pre-characterization, and depth for sample collection. Laboratory analytical results of soil and groundwater samples collected from the borings shall be utilized to ascertain whether health and safety concerns are present for construction workers and determine potential soil and/or groundwater handling and disposal options. Proposed soil borings and/or grab groundwater sample locations shall be determined following identification of the areas and depths of soil excavation and dewatering activities. If soil and/or groundwater impacts are identified, site workers involved in excavation activities shall be Hazardous Waste Operations and Emergency Response (HAZWOPER) trained (Occupational Safety and Health Administration [OSHA] 1910.120).</p>	CEQA MMRP	Pre-construction	The County will ensure that a PSI is conducted prior to final design, and that if any unexpected conditions are later encountered that the appropriate response is initiated.		
Condition #13 - Visual Impact Avoidance					
<p>To avoid adverse impacts, new sources of light, including any outside night lighting associated with construction, will be designed to protect wildlife and nighttime views, including views of the night sky. This design goal will be satisfied using a variety of means as applicable, including fixture types, cut off angles, shields, lamp arm extensions, and pole heights. Specific design preferences include not directing light upward or to other properties, avoiding brightly illuminated vertical surfaces where feasible, such as walls and lamp poles, and not directing lighting toward environmentally sensitive habitats. The Recommended Practices of the Illuminating Engineering Society of North America should be consulted for lighting levels and quality of light.</p>	Visual Impact Assessment	Pre-construction	The County will review design plans to ensure that this condition is met.		
Condition #14 - Erosion and Sedimentation Control During Construction					

<p>Develop a Storm Water Pollution Prevention Plan (SWPPP) to identify appropriate erosion control measures and other Best Management Practices (BMPs) necessary to minimize erosion and sedimentation during construction of project.</p>	<p>CEQA ISMND, NES</p>	<p>Pre- and During Construction</p>	<p>The County will ensure that a SWPPP be developed by a Qualified SWPPP Developer prior to construction and that appropriate erosion and sediment control BMPs are implemented throughout construction and until final stabilization is achieved. Construction will be conducted from July 1st - September 31st for any in-bay work. For upland construction activities that must take place during the late-fall, winter, or spring (e.g. to avoid avian nesting periods), temporary erosion and sediment control structures shall be in place and operational at the end of each construction day until permanent erosion control structures are in place.</p>		
<p>Condition #15 - Prevention of Spread of Invasive</p>					
<p>The County shall take measures to avoid the spread of invasive species. These shall include guidance provided by the State of California Aquatic Invasive Species Management Plan (CDFG 2008).</p>	<p>NES</p>	<p>During Construction</p>	<p>All equipment used for off-road construction activities will be weed-free prior to entering the project area. If used, mulches shall be weed free. Any seed mixes or other vegetative material used for re-vegetation of disturbed sites shall consist of sterile seed and/or locally adapted native plant materials to the extent practicable. Any equipment (including boots/waders) and construction equipment shall be properly disinfected or cleaned according guidance provided by the State of California Aquatic Invasive Species Management Plan prior to in-channel or bay work .</p>		
<p>Condition #16 - Air Quality/Dust Control</p>					

<p>The County shall include provisions in the construction bid documents that the contractor shall implement a dust control program to limit fugitive dust emissions.</p>	<p>NES</p>	<p>During Construction</p>	<p>Dust control program shall include the following requirements: Water inactive construction sites and exposed stockpile sites as necessary but at least daily, during regular work days, or until soils are stable. In accordance with California Vehicle Code, all trucks hauling soil and other loose material to and from the construction site shall be covered or should maintain at least 6 in. of freeboard (i.e., minimum vertical distance between top of load and the trailer). Any topsoil that is removed for the construction operation shall be stored on-site in piles not to exceed 4 feet in</p>		
<p>Condition #17 - Spill Prevention</p>					
<p>Construction specifications will include the following measures to reduce potential impacts to vegetation and aquatic habitat resources in the project area associated with accidental spills of pollutants (e.g., fuel, oil, and grease):</p>	<p>NES</p>	<p>During Construction</p>	<p>A site-specific spill prevention plan shall be implemented for potentially hazardous materials. The plan shall include the proper handling and storage of all potentially</p>		