



HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT



P.O. BOX 1030
Eureka, California 95502
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PERMIT APPLICATION

Date Filed 10/1/24

General Information	For District Use
1.) Name, Address, phone # and email of Developer, Project Sponsor and Legal Owner: Humboldt Bay Harbor Recreation and Conservation District P.O. Box 1030, Eureka, CA 95502	A. Application No. <u>2024-04</u> Application Type: Franchise <input type="checkbox"/> Permit <input checked="" type="checkbox"/> Lease <input type="checkbox"/>
2.) Address of Project and Assessor's block, lot and Parcel Number Within Approx. 1,400 acres tidal marsh habitats in Humboldt Bay	B. Date Received by Harbor District <u>10/01/2024</u> C. Date Accepted for filing by Commission <u>10/10/2024</u>
3.) Contact person Name, Address, phone # Chris Mikkelsen, HBHRCD Executive Director cmikkelsen@humboldtby.org (707) 443-0801	D. Date of Public Notice: <u>10/11/2024</u> E. Date of Environmental Compliance F. Date of Public Notice
4.) Attach list of names and addresses of all adjoining property owners	G. Date of Public Hearings <u>N/A</u>
5.) List and describe any other related Project Permits & Other Public Approvals required, including those required by City, Regional, State & Federal Agencies. Coastal Commission CDP (1-14-0249) North Coast Regional Water Quality Control Board	H. Date of Commission Action Approval: _____ Conditional _____ Disapproval _____
6.) Existing City/County Zoning Various	I. Expiration Date
7.) Proposed Site Use (Project Title) Humboldt Bay Regional Spartina Eradication Plan Implementation	

Describe in detail the proposed project:

The Humboldt Bay Regional Spartina Eradication Plan (Regional Plan) provides a framework for eradicating invasive *Spartina densiflora* (dense-flowered cordgrass) at a regional level using a coordinated strategic approach that has been underway since the early 2000s. The Regional Plan continues to be effectively implemented. The original Harbor District Permit 2014-05 for this project issued on 12/18/2014 expires on 12/18/2024. The Project remains consistent with the approved project description. This application requests a new Harbor District Permit for the ongoing project activities as fully described in the Regional Plan.

The Humboldt Bay Regional Invasive Spartina Eradication Project is a collaborative effort aimed at removing *Spartina* to restore and protect sensitive tidal marsh habitats in the region. Coordinated by the Humboldt Bay Harbor, Recreation, and Conservation District, the project involves partnerships with the Wiyot Tribe, Caltrans, Humboldt Bay National Wildlife Refuge, the City of Arcata, Redwood Community Action Agency (RCAA), the State Coastal Conservancy, and other stakeholders. These groups continue to work together to remove the invasive *Spartina* from tidal marshes around Humboldt Bay.

The project uses a combination of mechanical and chemical treatments, including specialized equipment like brush cutters and an amphibious Marsh Master, to remove *Spartina* from these areas. In 2013, a Programmatic Environmental Impact Report (PEIR) was developed and certified to streamline permitting and facilitate efficient eradication efforts. The PEIR project area (the Management Area) is the Humboldt Bay region which is defined as the area spanning from the Mad River to the north, the Eel River delta to the south, and includes the mouths of rivers, sloughs, estuaries, and tidal channels within Humboldt Bay. Key areas of concern include Eel River Estuary, Mad River Estuary, Mad River Slough, McDaniel Slough, Jacoby Creek, Eureka Slough, Salmon Creek, Hookton Slough, and the Salt River.

The invasive *Spartina* has infested significant portions of the tidal marshes (as much as 90% of Humboldt Bay's remnant salt marshes were affected in 2001), excluding native plant species, disrupting the benthic macroinvertebrate community, reducing primary productivity, and threatening to transform vital mudflats into salt marsh. The removal of *Spartina* is critical for preserving native biodiversity, preventing further habitat degradation, and protecting crucial foraging areas for shorebirds and waterfowl. The Regional Plan has been successfully implemented over the past nine years in tidal marshes, and, to a much lesser extent, mudflats of Humboldt Bay, the Eel River estuary, and the Mad River estuary. Site-specific plans for each of the proposed treatment areas in any given year are developed and include a description of the specific measures that will assure the restoration of native tidal marsh plant species in the treatment area, and how the mitigation measures detailed in the FPEIR and special conditions of the CDP will be implemented at each location. Additional Project information is available at the following links:

- Humboldt Bay Regional Spartina Eradication Plan: [http://humboldtбай.org/sites/humboldtбай.org/files/HB Invasive Spartina Eradication Plan.pdf](http://humboldtбай.org/sites/humboldtбай.org/files/HB%20Invasive%20Spartina%20Eradication%20Plan.pdf)
- CEQA EIR documents for "Humboldt Bay Regional Invasive Spartina Control and Native Salt Marsh Restoration": <https://ceqanet.opr.ca.gov/2011012015/2>

PRE-PROJECT EELGRASS CHECKLIST

Please complete the Eelgrass Pre-project Checklist below. Note that the checklist questions relate to the Area of Potential Effect (APE) associated with your project, which incorporates a surrounding buffer inclusive of the limits of potential construction and/or maintenance-related activities that could affect eelgrass habitat. Provide a copy of the completed questionnaire along with your permit application and a map depicting the proposed project location, potential eelgrass depth range -10 to +4 feet, and benchmark eelgrass distribution in the vicinity of the proposed project. Maps should be of an appropriate scale to clearly depict the preliminary/proposed APE boundary in relation to both existing and potential eelgrass resources as provided in the Humboldt Bay Eelgrass Comprehensive Management Plan and associated webpage (humboltdbay.org/eelgrass-management-plan). Here you'll find information and links including [eelgrass information for permit applicants](#), [a baseline eelgrass distribution map](#), and the [Humboldt Bay Eelgrass Comprehensive Management Plan](#). Contact the Harbor District office with questions (443-0801).

For New Projects:

		YES	NO
a)	Is the project located within 100 feet of previously mapped (known) eelgrass habitat?	X	
b)	Will any construction or new operational traffic occur within the vicinity of existing eelgrass?		X
c)	Is any portion of the project located in an area with depths ranging from -10 to +4 feet?	X	
d)	Does the project result in new cover, shading or other form of light reduction of open water areas ranging in depth from -10 to +4 feet?		X
e)	Is the project anticipated to affect wind or tidal circulation patterns within the bay?		X
f)	Could the project affect ambient water temperature or clarity or result in new effluent (including stormwater) discharge point?		X
g)	Does the project result in any placement of fill, including shoreline armor?		X
h)	Is the project anticipated to lead to an increase in boat traffic that could affect nearby eelgrass habitat through grounding, prop scarring, wake, or shading impacts?		X

For Maintenance/Repair Projects and Construction Activities:

		YES	NO
i)	Is project construction likely to increase turbidity? To what extent and for what duration?		X
j)	Will construction require the use of a barge or other vessel that may temporarily impact the bay floor (e.g. spud poles, anchoring, prop scarring, etc.) within known eelgrass habitat or within depths ranging from -10 to +4 feet?		X
k)	Will construction require the use of turbidity curtains in proximity to eelgrass habitat?		X
l)	Will project construction result in temporary shading from moored/anchored working vessel(s)?		X

If you responded yes to any of the questions above, your project may have the potential to affect eelgrass habitat and you'll need to conduct a preliminary eelgrass survey. Please refer to the District's [Eelgrass Management Plan webpage](#) for further guidance and a list of local agency contacts should you have additional questions.

Answer all questions completely on a separate page. If the question does not apply to your project, so indicate by marking N.A. Contact Harbor District Office with questions.

PROJECT DESCRIPTION

- 8. Site Size
Within Approx. 1,400 acres tidal marsh habitats in Humboldt Bay
- 9. Square Footage
N/A
- 10. Number of floors of construction
N/A
- 11. Amount of off-street parking provided
N/A
- 12. Attach plans
Humboldt Bay Regional Spartina Eradication Plan (“Regional Plan”)
- 13. Proposed scheduling
Ongoing
- 14. Associated projects
N/A
- 15. Anticipated incremental development
N/A
- 16. If residential, include the number of units, schedule of unit sizes, range of sale prices or rents, and type of household size expected.
N/A
- 17. If commercial, indicate the type, whether neighborhood, city or regionally oriented, square footage of sales area, and loading facilities
N/A
- 18. If industrial, indicate type, estimated per shift employment & loading facilities.
N/A
- 19. If institutional, indicate the major function, estimated per shift employment, occupancy, loading facilities, and community benefits derived from the project.
N/A
- 20. If the project involves a variance, conditional use or recognizing application, state this and indicate clearly why the application is required.
N/A

Are the following items applicable to the project or its effects? Answer yes or no.
Discuss all items answered yes.

- 21. Change in existing features of any bays, tidelands, beaches, lakes or hills, or substantial alteration of ground contours.

- No substantial alteration of ground contours will occur, habitat will be altered by removal of invasive species to allow for native species to replace them.
22. Change in scenic views or vistas from existing residential areas or public lands or roads.
No.
 23. Change in pattern, scale or character of general area of project.
No.
 24. Significant amounts of solid waste or litter.
No
 25. Change in dust, ash, smoke, fumes or odors in vicinity.
No
 26. Change in ocean, bay, lake, stream or ground water quality or quantity, or alteration of existing drainage patterns.
No
 27. Substantial change in existing noise or vibration levels in the vicinity.
 - A. During Construction.
Mechanical treatments will temporarily change existing noise and vibration levels temporarily but, potential impacts are mitigated within PEIR.
 - B. During Project Utilization. No
 28. Site on filled land or on slope of 10% or more.
No
 29. Use of disposal or potentially hazardous materials, such as toxic substances, flammable or explosives.
Herbicides are a proposed treatment method. Potential impacts are identified and mitigated in the PEIR.
 30. Substantial change in municipal services demand (police, fire, water, sewage, etc.)
No
 31. Substantially increase fossil fuel consumption (electricity, oil, natural gas, etc.).
No
 32. Relationship to larger project or series of projects
Regional *Spartina* eradication is part of a larger West Coast collaborative eradication extending from British Columbia, Canada to California.

ENVIRONMENTAL SETTING:

33. Describe the project site as it exists before the project including information on topography, soil stability, plants and animals, and any cultural, historical, or scenic aspects. Describe any existing structures on the site and the use of the structures. Attach photographs of the site. Photos will be accepted.
The project areas, located in the tidal marshes of Humboldt Bay, encompasses a diverse estuarine landscape characterized by its low-lying topography, which includes mudflats, sloughs, estuaries, and tidal channels. The elevation generally ranges from sea level to a few feet above, making the area highly influenced by tidal activity. The soil in the marshes is largely composed of silty and clay sediments, which are prone to saturation due to tidal inundation but generally stable in their natural state. However, the invasion of one species of cordgrass (*Spartina densiflora*) has contributed to habitat changes that impact soil and

sediment characteristics, particularly by promoting soil buildup in areas traditionally characterized by open mudflats.

Prior to the project, various sites within the Management Area are dominated by dense stands of *Spartina*, which has significantly altered the native plant community. Native salt marsh plants, such as Slender pickleweed (*Salicornia pacifica*), which typically thrive in these wetlands, have been reduced or displaced by *Spartina*. Native salt and brackish plants naturally found in this area include: seaside arrow-grass (*Triglochin maritimum*), salt marsh dodder (*Cuscuta salina*), tufted hairgrass (*Deschampsia cespitosa*), marsh jaumea (*Jaumea carnosa*), Humboldt Bay owl's-clover (*Castilleja ambigua ssp. humboldtiensis*), Slender pickleweed (*Salicornia pacifica*), gumplant (*Grindelia stricta*), and spear saltbush (*Atriplex patula*), Menzies' wallflower (*Erysimum Menziesii*) and beach layia (*Layia carnosa*). This shift in plant composition has also affected the local fauna. The natural tidal marshes serve as vital habitat for numerous species, including shorebirds, waterfowl, fish, and invertebrates. However, the spread of *Spartina* has degraded habitat quality, leading to declines in species that rely on mudflats and open tidal marshes for foraging and nesting.

Culturally, the project area holds significance for the Wiyot Tribe, particularly Tuluwat Island, located within Humboldt Bay. The island is central to Wiyot culture, and it represents an important historical and spiritual site. Additionally, the project area contains remnants of historical levees and tide gates, which reflect past human modifications to the landscape for agricultural and industrial purposes. The Eureka waterfront and Arcata wastewater treatment facility are also within the broader project region.

See the Regional Plan and PEIR for additional Information.

34. Describe the surrounding properties, including information on plants and animals and any cultural, historical, or scenic aspects. Indicate the type of land use (residential, commercial, etc.) intensity of land use (one-family, apartment houses, shops, department stores, etc.) and the scale of development (height, frontage, set-back, rear yard, etc.) Attach photographs of the vicinity. Photos accepted. The surrounding properties of the project site in the Humboldt Bay region include a mix of natural, residential, commercial, and industrial areas, as well as areas with cultural and historical significance. The project sites are predominantly bordered by tidal marshes, sloughs, estuaries, and mudflats. See the Regional Plan and PEIR for additional Information.

----- Questions 35; and 36 MUST BE ANSWERED! -----

35. How will the proposed use or activity promote the public health, safety, comfort, and convenience?

By removing the invasive *Spartina*, the project will help restore the natural balance of the tidal marsh ecosystem, which in turn supports biodiversity and ecosystem services. Healthy wetlands act as natural filters for pollutants, improving water quality in Humboldt Bay. This benefits not only local wildlife but also the surrounding communities that rely on the bay for recreation, commercial fishing, and other activities.

The restoration of tidal marshes through Spartina removal will improve the natural flood protection that wetlands provide. Healthy, functioning tidal marshes absorb storm surges and reduce the risk of flooding in surrounding residential and commercial areas, especially during high tides or severe weather events. By removing Spartina, which contributes to altered sedimentation patterns and higher flood risks, the project directly enhances the safety of nearby communities, mitigating potential damage from flooding.

Restoring the natural tidal flow in the marshes will help protect existing infrastructure, such as levees, tide gates, and nearby roads, by preventing further erosion and sediment build-up caused by Spartina. This ensures that local infrastructure functions as intended, reducing maintenance costs and the likelihood of failure, which could pose safety risks to the public. By addressing the invasion of Spartina and restoring native habitats, the project also promotes long-term environmental sustainability, which is essential for the overall well-being of the public. Biodiversity conservation ensures that the ecosystem remains resilient to future environmental changes, providing sustained benefits such as clean air, water, and opportunities for recreation and tourism, all of which contribute to the public's quality of life.

36. How is the requested grant, permit, franchise, lease, right, or privilege required by the public convenience and necessity?

The tidal marshes around Humboldt Bay provide numerous ecosystem services that are vital to the well-being of the local community. These services include water filtration, flood protection, carbon sequestration, and habitat for commercially and recreationally important fish and bird species. The requested permit enables the Spartina Eradication Project to restore these services by removing the invasive Spartina, which currently degrades the natural functioning of the marshes. Without the permit, the invasive species would continue to spread, further compromising the bay's ability to support these essential services that benefit public health and safety.

The requested permit is a vital component of a larger, coordinated effort to manage invasive species and protect the West Coast's estuarine ecosystems. This project is part of a broader regional strategy that has been recognized as necessary by state, federal, and regional conservation groups. The granting of this permit enables the project to contribute to long-term environmental stewardship, ensuring that the benefits of a restored tidal marsh system are sustained for future generations.

37. Financial statement:

- A. Estimated project cost. TBD
- B. How will the project be financed?
Grants and funding from other agencies.

38. Describe fully directions necessary to arrive at project site. N/A

39. The Applicant agrees to as a condition of the permit being issued, to indemnify and hold harmless the Humboldt Bay, Harbor Recreation and Conservation District from any and all claims, demands, or liabilities for attorneys' fees obtained from or

against demands for attorney's fees, costs of suit, and costs of administrative records made against District by any and all third parties as a result of third party environmental actions against District arising out of the subject matter of this application and permit, including, but not limited to, attorney's fees, costs of suit, and costs of administrative records obtained by or awarded to third parties pursuant to the California Code of Civil Procedure Section 1021.5 or any other applicable local, state, or federal laws, whether such attorneys' fees, costs of suit, and costs of administrative records are direct or indirect, or incurred in the compromise, attempted compromise, trial, appeal, or arbitration of claims for attorneys' fees and costs of administrative records in connection with the subject matter of this application and permit

NOTE

The District hereby advises the Applicant that, under California Public Resources Code (PRC) Section 21089, the District when a lead agency under the California Environmental Quality Act (CEQA) of 1970, as amended, pertaining to an Environmental Impact Report (EIR) or a Negative Declaration (MND/ND) may charge and collect from the Applicant a reasonable fee in order to recover the estimated costs incurred by the District in preparing an EIR or MND/ND for the project and the procedures necessary for PRC compliance on the Applicants project.

In the event your project contains an analysis of issues pertaining to CEQA, for which District staff is not competent to independently review, or District requires the same in preparation of an EIR or MND/ND for the project, the District may retain a reviewing consultant to evaluate the content of the Administrative-Draft EIR and Final EIR or MND/ND with respect to these issues. The cost of such reviewing consultant services shall be borne by the Applicant.

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present the information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. And I agree to indemnify the District as described in part 39 of this application.

Dated: _____

For _____