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**Humboldt Bay Harbor,
Recreation and Conservation District**
(707)443-0801
P.O. Box 1030
Eureka, California 95502-1030



Date: 3/11/24

To: Resource Agencies, Property Owners, and Whom It May Concern

**CC: Chris Mikkelsen, Executive Director, HBHRCD
Miles Slattery, City Manager, City of Eureka
Debra O'Leary, USACE
Hank Seemann, Deputy Director, Humboldt County Public Works**

From: Rob Holmlund, Development Director, HBHRCD

Re: Request for Information: Beneficial Reuse of Dredge Materials

Summary

No later than 3/29/24, the Humboldt Bay Harbor District (District) is seeking information from various parties about prospective future needs for fill materials in the greater Humboldt Bay region. Specifically, the District is seeking information and ideas about where to place beneficially reused dredge materials. Information is sought from property owners, land managers, conservation-based organizations, development specialists, and other similar entities. Please forward this request to any party/entity/organization that may be interested.

Terminology

The bed of channels, berths, and marinas within Humboldt Bay periodically require maintenance to remove the buildup of sediment. In the case of new development, the bed of such facilities must be excavated to lower depths to allow ships the space to navigate. Removing materials is called "**dredging**." The material removed is called "**dredge materials**." In the Humboldt Bay region, dredge materials are typically disposed of at the Humboldt Open Ocean Disposal Site (HOODS), which is a designated area in the Pacific Ocean over three miles west of the mouth of Humboldt Bay. However, when feasible, dredged material can be used as a resource rather than treated as a waste product. Using dredged materials as a resource is called "**beneficial reuse**."

Background

The Harbor District and the City of Eureka periodically dredge their respective marinas, while various terminal owners throughout the Bay also conduct periodic dredging of berths. The US Army Corp of Engineers also dredges the entrance and navigation channels of Humboldt Bay on a regular basis. In addition, the Harbor District is pursuing a project at the Redwood Marine Terminal site on the Samoa Peninsula that is proposed to include a substantial quantity of dredging. Between all these sites, millions of cubic yards of sand and silt/clay may be available for beneficial reuse over the course of the next ten years.

Beneficial reuse of these dredge materials could potentially be used throughout the Humboldt Bay region for:

Request for Information: Beneficial Reuse of Dredge Materials (Released on 3/11/24; Responses due 3/29/24)

- Raising specific sites in preparation for sea level rise;
- Augmenting salt marshes to help marsh surfaces keep pace with sea level rise;
- Repairing or building levees/berms/dykes;
- Creating living shorelines to attenuate wave-generated erosion;
- Engineering with nature shoreline protection;
- General construction fill;
- Other similar uses.

Beneficial reuse options may also align with the federal government’s “Opportunities to Accelerate Nature Based Solutions: A Roadmap for Climate Progress, Thriving Nature, Equity, & Prosperity¹” and “Engineering with Nature²” where applicable for addressing shoreline erosion, tidal flooding, habitat improvements, climate change mitigation, and storm surge risks through an alignment of natural and engineering processes.

Note that sediment testing/clearance and regulatory permits/approvals will be required before any dredge material can be used for any beneficial use projects. Primary considerations are confirmation that dredge materials are not contaminated and a determination that dredge material grain size is suitable for the proposed beneficial use project site. The entity that is conducting dredging (e.g. USACE, Harbor District, City of Eureka) will be responsible for testing and permitting of dredging activities. Recipients of dredge materials will be responsible for permitting and clearances of the ultimate destination(s) of beneficially reused materials.

Request for Information

Any party that has planned projects, speculatively envisioned concepts, and/or basic ideas is requested to provide information so that the District and related partners can start planning programmatically for the future beneficial reuse of dredge materials around Humboldt Bay. Desired information includes site location, intended purpose of the reused materials, grain size/type, a low-end estimate of the volume of materials to be used, a high-end estimate of the volume of materials to be used, and any other information that would be useful for regional planning. Please provide the information by filling in a row in the attached table for each envisioned site. The table includes a few examples of prospective projects to provide guidance regarding how to complete the table.

Logistics

Please complete the attached table by 3/29/24 and return to:

Rob Holmlund, Development Director, HBHRCD

rolund@humboltdbay.org

707-443-0801

601 Startare Dr, Eureka, CA, 9501

¹ OPPORTUNITIES TO ACCELERATE NATURE- BASED SOLUTIONS (whitehouse.gov) (<https://www.whitehouse.gov/wp-content/uploads/2022/11/Nature-Based-Solutions-Roadmap.pdf>)

² Home Page - Engineering With Nature (dren.mil) (<https://ewn.erdcdren.mil/>)



REQUEST FOR INFORMATION: POLL OF PLANNED/PROSPECTIVE PROJECTS FOR HUMBOLDT BAY BENEFICIAL REUSE PROJECTS

Lead Entity	Project Name	Site Description	Intended Purpose for Desired Material	Material Type				Volume (low estimate) (K CY)	Volume (high estimate) (K CY)	Engineering w/ Nature ¹	Notes
				Very Coarse (gravel)	Coarse (sand)	Fine (clay/mud)	Very fine				
County of Humboldt, Public Works	Humboldt Bay Living Shoreline Restoration Project	Shoreline between Bracut and Brainard along US 101 (between Eureka and Arcata)	Creation of salt marsh			X	X	125	125	Yes	Initial feasibility study completed in 2022; advanced feasibility study and CEQA/permitting to be conducted 2024-2025 (https://humboldt.gov/2487/Sea-Level-Rise).
			Creation of shingle beach	X				20	20	Yes	Gravel may not be available via any future dredging activities within Humboldt Bay
Humboldt Harbor District and/or other(s)	Conceptual Concrete Batch Plant	Sand & Gravel Operations; Exact site(s) to be determined	Use in concrete batch plant operations	X	X			25	200	No	Permitted construction sites for fill. Existing sand/gravel operation for concrete batch plant
Humboldt Harbor District	Redwood Marine Terminal Redevelopment	Ocean Beach Nourishment; exact site(s) to be determined	Erosion Hot Spot & Longshore Drift Supplementation		X			100	500	Yes	Beach compatible sand placed in nearshore area of ocean beach
Humboldt Harbor District	Redwood Marine Terminal Redevelopment	North Upland Terminal Construction	Fill to raise upland to mitigate Sea Level Rise	X	X			250	500	Yes	Sand, gravel, or sand with minor silt content used to raise grade to mitigate SLR for low lying areas of north half of marine terminal
Humboldt Harbor District and/or other(s)	Thin layer placement on salt marshes for Spartina eradication/prevention and SLR	Tbd	Raise salt marshes to address future SLR and to eradicate/prevent Spartina growth			X	X	10	100	Yes	Early concept; setbacks from waterways tbd; many details tbd.
County of Humboldt											
USFWS											
Caltrans											
City of Eureka											
City of Arcata											
BLM											
CDFW											
Friends of the Dunes											
Jacoby Creek Land Trust											
Manila CSD											
Peninsula CSD											
HBMWD											
PG&E											
CalTrout											
ESTIMATED TOTAL								530	1,445		NA

FOOTNOTES:

1. See the following links (<https://www.whitehouse.gov/wp-content/uploads/2022/11/Nature-Based-Solutions-Roadmap.pdf>) and (<https://ewn.ercd.dren.mil/>).

