

**REQUEST FOR STATEMENT OF QUALIFICATIONS
FOR A
FEASIBILITY STUDY FOR THE BENEFICIAL REUSE OF DREDGED
MATERIALS FOR TIDAL MARSH RESTORATION AND SEA LEVEL
RISE ADAPTATION IN HUMBOLDT BAY

HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION
DISTRICT**

**P.O. Box 1030
Eureka, CA 95502-1030**

The Humboldt Bay Harbor, Recreation and Conservation District is soliciting Statements of Qualifications from qualified consulting firms to produce a Feasibility Study for the Beneficial Reuse of Dredged Materials in Humboldt Bay.

The Request for Qualifications document is available at the Harbor District office, 601 Startare Drive, Woodley Island, Eureka, California (phone 707-443-0801) between the hours of 8:00 AM and 5:00 PM Monday through Friday and on the District's website at www.humboldtbay.org

Completed Statements of Qualifications must be received by the Humboldt Bay Harbor District by 4:00 PM May 31, 2013 to be eligible for consideration.

The Harbor District reserves the right to reject any and all responses to this request. The Harbor District will not be liable for any cost incurred incidental to the preparation, submittal or evaluation of any response to this request, or in the negotiation, execution and delivery of an agreement that may be awarded as a result of this Request for Qualifications.

Mike Wilson
President, Board of Commissioners
Humboldt Bay Harbor, Recreation and Conservation District

**HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT
P.O. Box 1030
EUREKA, CA 95502-1030**

Request for Qualifications

SUMMARY

The Humboldt Bay Harbor, Recreation and Conservation District (Harbor District) is requesting Statements of Qualifications from qualified firms and individuals to prepare a study of the feasibility of beneficial reuse of dredged materials for habitat restoration and sea level rise adaptation in Humboldt Bay.

Dredging is an ongoing and necessary component of maintaining navigational safety and maritime activities in Humboldt Bay. Disposing of the dredged materials generated in these projects is expensive and can be difficult to permit, in part because it has been approached as a waste disposal issue rather than as a potentially valuable material for beneficial reuse.

There is increasing interest in wetland habitat restoration around Humboldt Bay, and in preparing for the challenges that sea level rise will pose to the human infrastructure and the natural habitats in and around the Bay. These efforts may require substantial volumes of material, to raise the elevation of subsided tidelands behind dikes, to create or restore salt marsh both as habitat and as natural 'armoring' for infrastructure, and to help repair and strengthen dikes. Local efforts currently underway and highly relevant to this project include the development of a Coastal Regional Sediment Management Plan by the Army Corps of Engineers, and the Humboldt Bay Sea Level Rise Adaptation Planning Project.

BACKGROUND

During the late-nineteenth and early twentieth centuries, diking and filling for agricultural use reduced Humboldt Bay salt marshes from an estimated 10,000 acres to only 850 acres today, less than 10% of the estimated historic extent. Diking and draining of former tidelands has led to their subsidence over time. Marsh soils typically have high organic matter content because the anaerobic conditions associated with frequent flooding are not conducive to decomposition. When tidal inundation is restricted or eliminated, the organic matter in the soil breaks down and the soil subsides, often resulting in lower elevations in diked former tidelands than in adjacent intertidal coastal marshes. For example, elevations in diked former tidelands at the White Slough Unit of the Humboldt Bay National Wildlife Refuge (HBNWR) are approximately three feet lower than elevations of tidal marsh adjacent to and outside the dikes. If dikes around these areas are breached without fill material being added to the former tidelands, they would become mudflats or subtidal habitats instead of tidal marsh. Natural resource agencies such as HBNWR seek to restore diked former tidelands in areas like White Slough, but are constrained by the lack of fill

material to raise surface elevations adequately to restore tidal marsh. Dredged materials may provide suitable fill to raise the elevations of these areas. Dredged materials have been used successfully for wetland restoration at the Sonoma Baylands and at the Hamilton Wetlands, both Conservancy funded projects in Northern San Francisco Bay.

Dredged materials in Humboldt Bay are generated by two distinct types of dredging operations: 1) maintenance dredging of the federally-authorized navigation channels and 2) maintenance dredging conducted at a variety of public and private facilities outside of the federally authorized channels (“small scale dredging”). Dredged material from the federal channels is composed primarily of coarse sediment and, since 1990, has been transported to the approved Humboldt Open Ocean Disposal Site (HOODS) approximately 3 nautical miles northwest of the entrance to Humboldt Bay. In order to keep sediment in the littoral cell and decrease the potential recession of the North Spit of Humboldt Bay, the US Army Corps of Engineers plans to begin placing dredged material from the federal channels in a temporary nearshore disposal site, located 3.5 miles north of the entrance to Humboldt Bay. Since the 1970s, dredged material from small scale dredging has been transported to upland disposal sites, or on nearby beaches during the winter months. Small scale dredging generates between 210,000 and 300,000 cubic yards of materials every ten years. Approximately 200,000 cubic yards of the total comes from the Woodley Island Marina and the Eureka Public Marina, the two largest facilities where small scale dredging occurs.

The Harbor District is a county-wide special district with permit jurisdiction over all tide, submerged and other lands granted to the District including all of Humboldt Bay. It was created by the state legislature in 1970, and approved by the Humboldt County electorate in 1973 to oversee development of harbors in Humboldt Bay for benefit of the public. Along with the US Army Corps of Engineers and the California Coastal Commission, the Harbor District regulates dredging and disposal activities in Humboldt Bay. Its role in maintaining the Port of Humboldt Bay and conserving Humboldt Bay’s natural resources makes it uniquely qualified to carry out this project. The Draft CRSMP for the Eureka Littoral Cell recommends that the Harbor District and the County be the lead agencies for the adoption of the final CRSMP.

SCOPE OF WORK

This Request for Qualifications is for the preparation of a study examining the feasibility of beneficial reuse of dredged materials for habitat restoration and sea level rise adaptation in Humboldt Bay. Such projects could include the creation of marshes on the Bay side of dikes, or the creation of brackish marshes and set-back dikes on the landward-side of dikes. Climate change adaptation approaches involving marsh creation can reduce vulnerability to sea level rise while providing environmental benefits, and have been evaluated for use at sites in San Francisco Bay, such as the Hayward Shoreline¹.

The feasibility study would build off of the Coastal Regional Sediment Management Plan (CRSMP) for the Eureka Littoral Cell prepared by Moffat and Nichol for the U.S. Army

¹ Preliminary Study of the Effect of Sea Level Rise on the Resources of the Hayward Shoreline (March 2010) prepared by Phillip Williams and Associates for the Hayward Area Shoreline Planning Association.

Corps of Engineers. The CRSMP includes a discussion of the potential to utilize dredged materials from Humboldt Bay for tidal marsh restoration and for creating transitional marsh edge habitat in place of armored shorelines, possibly including a recreational trail in the transitional area. The feasibility study will further develop the reuse approaches outlined in the CRSMP, as well as identify additional or alternative reuse potential. At least three pilot projects will be identified and explored in detail, including the physical, biological, financial, and regulatory opportunities and constraints. At least one of the three pilot projects will be developed at the level of detail needed to advance directly to the engineering and permitting stage.

Specific study objectives include a) identifying specific reuse project types and locations; b) identifying key hurdles (regulatory, fiscal, etc...) to project implementation and paths to address those hurdles; c) engaging agencies and other stakeholders throughout the process; and d) analysis of at least three beneficial reuse pilot project opportunities, and development of at least one of those pilot projects at the level of detail needed to advance directly to the engineering and permitting stage.

An advisory committee will be convened by the Harbor District to scope and review the feasibility study. The consultant will be expected to attend a minimum of two meetings with the advisory committee. One meeting would be held at the conclusion of Task 1 to determine the scope of the study and select sites, and an additional meeting would be held to present the draft study for review and discussion. The consultant will be expected to incorporate comments from the advisory committee at both points.

Anticipated tasks and deliverables include the following:

1. **Outline of Study:** An initial outline of the feasibility study will be developed, including a methodology for the feasibility assessment and a list of potential pilot project sites. The consultant would present the draft outline and site list at a meeting of the advisory committee and incorporate one round of comments into a final outline.

Deliverable: Study outline, including methodology and draft list of sites.

Schedule: Six weeks after contract execution

2. **Final Study Outline:** including study methodology and site selection.

Schedule: Eight weeks after contract execution

3. **Feasibility Study:** The study will assess the feasibility of dredged material reuse for habitat restoration and sea level rise adaptation in Humboldt Bay, with a focus on the specific sites identified in Task 1, including the physical, biological, financial, and regulatory opportunities and constraints. The study will include a) an analysis of the approximate volume of sediment required to achieve conceptual restoration and/or adaptation goals at specific sites; b) an assessment of potential sediment sources, including an analysis of sediment quality criteria (grain size, contaminant levels...) appropriate to different reuse options; c) potential methods and approximate costs for delivering dredged material to project sites, and d) identifying key hurdles (regulatory, fiscal, etc...) to project implementation and paths to address those hurdles. The

study will include comparisons of beneficial reuse costs, challenges, and opportunities relative to currently used disposal options for Humboldt Bay sediments. The study will include analysis and conceptual design of at least one pilot project at the level of detail needed to advance directly to the engineering and permitting stage.

In addition to more frequent comments and communications with Harbor District staff, the consultant will present a draft study at a meeting of the advisory committee and incorporate those comments into the final study. The final workplan details will be set via the contract between the Consultant and District; a draft schedule and deliverables are provided here to represent how the District foresees that workplan.

Deliverables

Draft Schedule

A. Draft Study Outline and Initial Advisory Committee Meeting

6 weeks after contract execution

B. Final Study Outline and site selection

8 weeks after contract execution

C. Draft assessment of one site (as a template)

12 weeks after contract execution

D. Draft feasibility study

24 weeks after contract execution

E. Final feasibility study

30 weeks after contract execution

The selected consultant shall provide regular project updates to the Harbor District.

FUNDING

The Harbor District has a maximum of \$70,000 available for this contract.

SUBMITTAL GUIDELINES

Interested firms/teams should submit to the Harbor District a statement of qualification and a written statement of approach. Proposals must include:

1. Identification of members of the firm/team, including Curriculum vitae of each member of the firm/team, identifying relevant education and experience (see below). If the firm/team contemplates any subcontract for the performance of any contract tasks, please identify those tasks and subcontractors.
2. A description of the consultants' proposed approach to completing the tasks outlined in the scope of work and in developing the study (maximum of 4 pages)
3. A tentative schedule

4. The job title, hourly billing rate, expected number of hours, and the percent of their time each team member will devote to each task. In addition, a statement of anticipated expenses in addition to the hourly rates, (i.e. office overhead, travel...)
5. A statement of commitment to complete the project with the available funds as described above.
6. Name and contact information of three professional references for the team/firm.
7. Any potential conflicts of interest that the firm/team may have in carrying out the tasks described herein.
8. Descriptions of no more than three projects completed by the consultant which are indicative of the ability to carry out this project.

Please submit three (3) copies of your response to this RFQ. Responses must be received by the Harbor District on or before **5pm on May 31st 2013** to be considered. SOQs should be addressed to:

Dan Berman
Director of Conservation
Humboldt Bay Harbor, Recreation and Conservation District
P.O. Box 1030
Eureka, CA 95502-1030

Reviewing the SOQs

Potential contractors will be ranked based on the following criteria:

- 1) Responsiveness to this Request, especially the submittal guidelines, and demonstrated understanding of the project goals and scope.
- 2) Demonstrated competence in the areas of environmental compliance and natural resource planning, including:
 - Experience with relevant environmental laws and regulations
 - Experience with dredged materials reuse projects
 - Experience in preparing natural resource management plans
 - Experience with estuarine/tidal marsh restoration, especially in Humboldt Bay
 - Experience with natural resource management in the Humboldt Bay region
 - Experience acquiring permits for similar projects in the Coastal Zone
 - GIS mapping capability
- 3) Specialized qualifications for the services to be performed, such as experience developing or implementing beneficial reuse projects, dredge projects and dredged material disposal projects, sea level rise adaption plans, or habitat restoration plans;

- 4) State-Certified small Business status of the contractor submitting a statement of qualification;
- 5) State-Certified Disabled Veteran Business Enterprise (DVBE) status of the contractor submitting a statement of qualification;

Selection Process

The anticipated selection process is as follows:

1. A panel will review the qualifications submitted.
2. The panel may request additional information from one or all Consultants.
3. Interviews may be scheduled with one or more Consultants.
4. The selected Consultant will be invited to enter into contract negotiations with the District .
5. Should the District and the selected firm(s) not reach a mutual agreement, the District will terminate negotiations and move to the next qualified firm and proceed with negotiations.

The retained consultant will be hired as an independent contractor pursuant to a contract with the Harbor District. The contractor will be required to carry all applicable insurances with the District named as an additional insured and to provide appropriate indemnification to the District.

The consultant should anticipate that ten percent (10%) will be withheld until all work is completed to the satisfaction of the Harbor District. The Harbor District must also approve all interim work products before payment.

Contact

Questions about the RFQ process may be emailed to Dan Berman, Humboldt Bay Harbor Recreation and Conservation District, dberman@humboldtby.org. No phone calls please.