

## MEMORANDUM FOR RECORD:

**SUBJECT: VOLUME REVISION FOR THE BAY CENTER MARINA ENTRANCE CHANNEL AND NO-TEST DETERMINATION FOR THE BAY CENTER MARICULTURE DOCK (NWS-2012-157) EVALUATED UNDER SECTION 404 OF THE CLEAN WATER ACT FOR EITHER FLOWLANE DISPOSAL AND/OR BENEFICIAL REUSE.**

- 1. Introduction.** This memorandum supplements the October 7, 2011 suitability determination (<http://www.nws.usace.army.mil/PublicMenu/documents/DMMO/Bay-Center-Marina-O&M-DY12-SDM.pdf>), and reflects the consensus determination of the Dredged Material Management Program (DMMP) agencies (U.S. Army Corps of Engineers, Washington State Departments of Ecology and Natural Resources, and the Environmental Protection Agency) on increasing the volume from 18,000 cubic yards (cy) up to 60,000 cy for the single dredged material management unit (DMMU) characterized for the Entrance Channel, and also documents the no-test determination for the approximately 1,000 cy of maintenance material proposed for dredging at the Bay Center Mariculture Company dock.
- 2. Volume Increase.** The project area is ranked low, which supports dredging up to 60,000 cy for well mixed, homogenous sediments as a maximum dredged material volume for each Dredged Material Management Unit (DMMU) (Table 4-4, DMMP 2009 Users Manual). The initial characterization estimated a maintenance volume within the Bay Center Marina Entrance Channel of 18,000 cy. The maintenance dredging volume is now expected to be approximately 45,000 cy. In anticipation of future maintenance dredging, the volume revision is increased up to the ceiling limit of 60,000 cy for the single DMMU characterized. The volume revision has been coordinated with the DMMP agencies for consensus and approval.
- 3. No-Test Determination.** Under the DMMP guidelines, small projects may be exempt from testing if they meet certain volume restrictions (PSDDA 1988). For low ranked areas the no-test volume limit is 8,000 cy (DMMP Users Manual 2009). The DMMP agencies performed a reason-to-believe analysis relative to sediment quality concerns and no-testing requirements for the maintenance dredging of approximately 1,000 cy from the Bay Center Mariculture Dock. The Bay Center Mariculture Company provided an evaluation of the dock's history and background relative to material proposed for dredging (Attachment 1). The proposed Bay Center Mariculture Dock dredging meets the volume limit, and no-reason-to-believe evaluation. Therefore, the DMMP agencies have determined that no testing is required for the material at the dock.
- 4.** This memorandum documents the volume revision for the Bay Center Entrance Channel and the no-test evaluation of material proposed for dredging at the Bay Center Mariculture Dock. However, it does **not** constitute final agency approval of the project. During the public comment period that follows the public notice, the resource agencies will provide input on the overall

project. A final decision will be made after full consideration of agency input, and after an alternatives analysis is done under section 404(b)(1) of the Clean Water Act.

**5. References.**

DMMP Users Manual, 2009. Dredged Material Evaluation and Disposal Procedures – Users Manual. Dredged Material Management Program Agencies: U.S. Army Corps of Engineers Seattle District, U.S. Environmental Protection Agency, Region 10, Washington State Department of Ecology, Washington State Department of Natural Resources. November 2009.

PSDDA, 1988. Evaluation Procedures Technical Appendix – Phase I – Central Puget Sound. U.S. Army Corps of Engineers, Seattle District, U.S. Environmental Protection Agency, Region 10, Washington State Department of Ecology, Washington State Department of Natural Resources. June 1988.

**The signed Volume Revision and No-Test SDM is on file in the DMMO Project File**

**Concur:**

\_\_\_\_\_  
Date David R. Kendall, Ph.D., Seattle District Corps of Engineers

\_\_\_\_\_  
Date Justine Barton, Environmental Protection Agency

\_\_\_\_\_  
Date Laura Inouye, Ph.D., Washington Department of Ecology

\_\_\_\_\_  
Date Celia Barton, Washington Department of Natural Resources

**Attachment:**

**Copies Furnished:**

- Rebecca Chaffee, Port of Willapa
- Richard L. Wilson, Ph.D., Bay Center Mariculture Company
- Elizabeth Chien, Navigation Project Manager
- Ron Wilcox, Regulatory Project Manager
- Justine Barton, EPA
- Laura Inouye, Ph.D., Ecology
- Celia Barton, DNR
- DMMO File

## Attachment 1

To: Dr. David Kendall and Ms. Rebecca Chaffee  
Re: Background on Private Dock at Bay Center proposed dredging area

Hello David and Rebecca,

I would be glad to give a brief overview of the locations here in Bay Center along Dike Road. From the attached image one can see the only three properties with structures on the east side (riverside) of Dike Road from highway 101 to the Bay Center boat basin channel a distance of two miles. At this time our company owns the north and south locations. The center property is owned by Nisbet Oyster Company and is used for setting oyster larvae. All have docks/piers for access and working area over the tideland and Palix River. The up stream (south) old building was an oyster-opening house in the fifties - sixties and we purchased it in 1971. My purpose in moving from a professorship in geology to an old building along the river was to develop the techniques to grow veliger oyster and clam larvae and learn how to culture the single celled algae used to feed them during the swimming stage. I picked this site for the reason that there was no sign of any contamination and most important no potential source thereof to interfere with larval growth. Bivalve larvae are quite sensitive to not only petroleum type products and chemicals but also metals such as copper (as in bottom paints, etc.). I spent a great deal of time checking out this location for clean seawater which included the processing plant where the dredging is proposed (about 300 feet downstream) from our original hatchery (south property). The hatching and growing of larvae was successful at this location and many of the techniques we developed are used today in the industry. This was the first shellfish hatchery in the state of Washington growing and setting the first oysters on algae we cloned and feed from continuous cultures. The hatchery was in operation for over 20 years without any sign of water quality trouble from pumping out of the Palix River.

Before moving here, I checked for the petroleum products such as diesel fuel in the shore sediments as pumping sea water was key to the business. I investigated as to whether any boat repair, bottom cleaning, etc., was common around the buildings. The larger shrimp boats, oyster dredges, etc. are taken to established sites such as in South Bend where there exists proper disposal means for materials being cleaned off. Also, the steep bank does not provide much of a working area. There is also a strong ebb and flood tidal current along the deep south part of the river along the bank and under and in front of the structures. From my interpretation the fluvial aggradational deposits of clastics (mainly silt) from upstream are the main focus of the proposed dredging. As to upstream potential sources of pollutants, there are none that I could detect. There are probably only about five structures or property with homes and no industrial sites in the drainage upstream area (estimate >25 miles of shoreline in the three branches of the Palix River). All of those properties are at least two miles distance from the dredging site and on the east side of US 101.

The building(s) on the downstream side (NW) associated with the docks where we need to deepen the near shore side and in front where we load oysters into the processing area has always been used for crab and shrimp processing. I have lived here for forty years and have been associated with the owners of Harbor Bell during that time. We

purchased it in 1997. Their commercial shrimp and crab processing during the 1970-1995 was managed by very responsible and consciences folks who ran the operation and were always concerned about waste. In fact, they were very supportive of our efforts and knew how intolerant veliger larvae are to many materials. Not only being careful of any petroleum and chemicals (e.g. for cleaning) they had installed all the modern equipment to even remove crab shell before water was returned to the river. The fish and crab remains was utilized on nearby pastures and used as a soil enhancement. Their boat moorage was clean with all fuel being delivered via truck and put directly on to the various boats. After we purchased Harbor Bell we have continued to maintain a very clean area under the watchful eye of the Dept. of Health inspections as we keep live oysters and clams on the shell bottom below the building. We maintain DOH approved wet storage holding on floats at the dock. For our boats the fuel is all pumped to the on-board tanks from an inside upland tank (at south end of the south property) which sets within a large rectangular tank inside the south building.

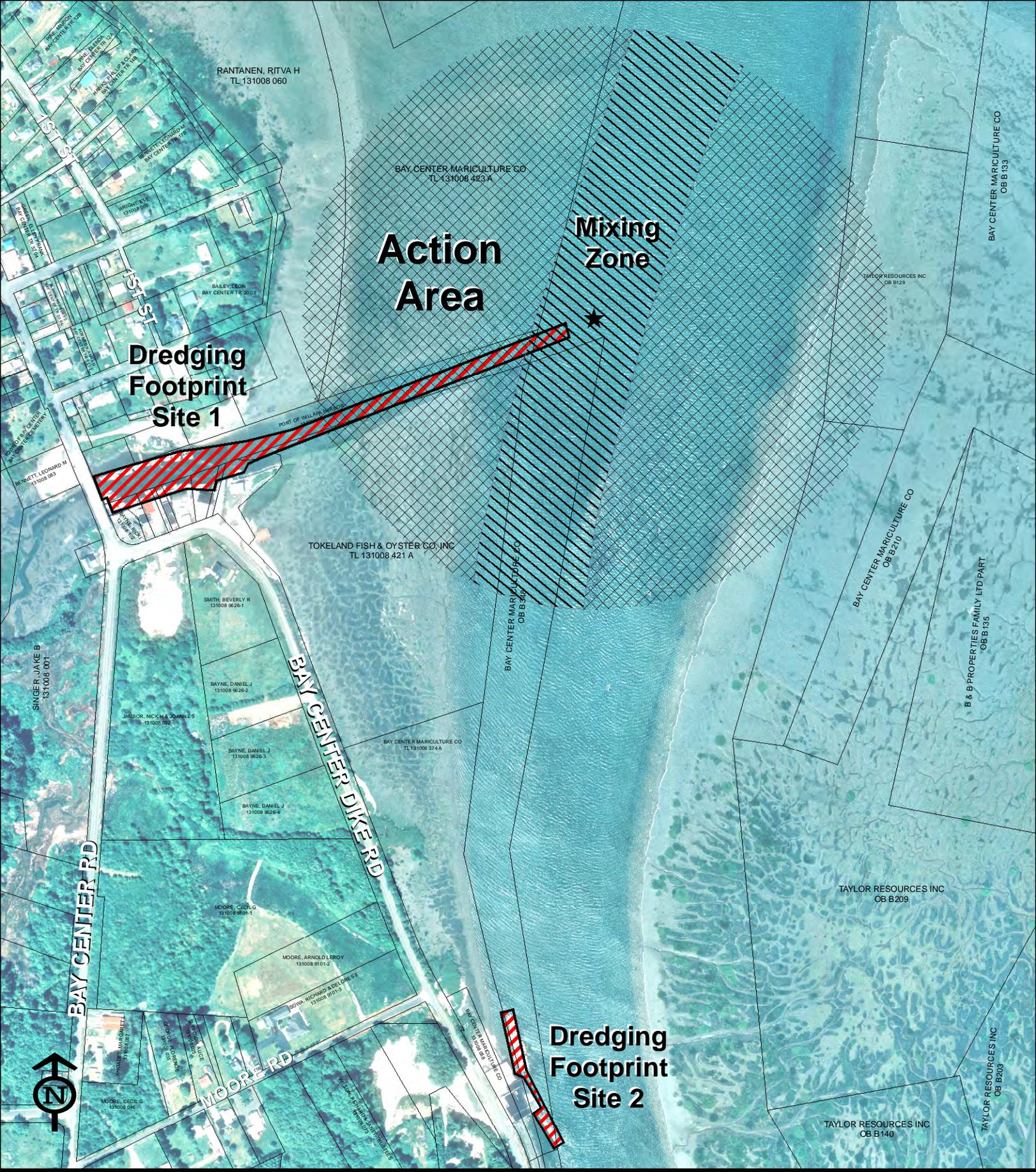
In short, from my view, there has never been a source and for that matter, any sign of persistent pollutants that could have been deposited within the sediments we intend to remove.

Sincerely,

*Dick*

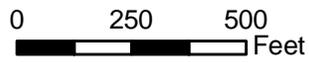
Richard L. Wilson, Ph.D.  
President, Bay Center Mariculture Co.  
[www.baycenterfarms.com](http://www.baycenterfarms.com)





PURPOSE: BAY CENTER  
 MAINTENANCE DREDGING  
 DATUM: MLLW  
 IN: THE PALIX RIVER  
 AT: BAY CENTER

## Bay Center Dredging Action Area



Map Scale 1:5,000

### MAP LEGEND

- ★ DREDGE DISPOSAL SITE
- ▨ ACTION AREA (1000' RADIUS)
- ▧ MIXING ZONE
- 2011 PACIFIC COUNTY TAXLOTS
- ▨ DREDGING FOOTPRINT

