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# Cleaning Up Our Toxic River

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## DREDGING ACTIVITIES & THE PORTLAND HARBOR CLEANUP

*Unsafe levels of toxic chemicals lie along the bottom of the Willamette River downstream of Oregon City. DEQ is proposing to lead the clean-up of the most industrialized section (6 miles between Swan and Sauvie Islands), called the Portland Harbor, in order to avoid its designation as a federal Superfund site.*

### Why Is the River Dredged?

One hundred years ago, the Willamette River was 20 feet deep. Over the course of this century, dredging has deepened the river's channel to 40 feet in an on-going battle against the estimated 1.7 million cubic yards of suspended sediment carried by the river annually. About 80% of sediments in the water are fine silt and clay particles; the rest is sand. Some of these sediments are deposited along the river bottom while others continue on to the Columbia River where they are deposited throughout the Columbia River Estuary.

Every 2-5 years, the Army Corps of Engineers dredges the navigation channel in the lower Willamette River to remove the accumulation of sediment on the bottom. This keeps the channel 40 feet deep—deep enough for large shipping vessels to enter the Portland Harbor. Berthing areas—where big ships can pull closer to the river's banks to load and unload cargo—are also routinely dredged to maintain depth. Turning basins, within which wide vessels can turn around, private marinas, and waterfront construction projects also require dredging.

### U. S. Army Corps of Engineers' Channel Deepening Plan

The Port of Portland wants to deepen the navigation channel from 40 feet to 43 feet from the mouth of the Columbia River to the Broadway Bridge, to accommodate larger ships. The proposed channel deepening project would disturb contaminated sediments in the

industrialized section of the Willamette River. Deepening the River would likely increase erosion of shorelines where higher levels of toxic materials tend to be buried.

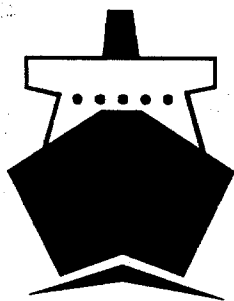
### Channel Deepening Fast Facts

- Cost of entire project: \$175 million.
- Average annual transportation savings resulting from channel deepening: \$39 million.
- Cost of Willamette portion: \$29 million.
- Percent of cost assumed by local sponsors: approximately \$7 million.
- Amount of sediment that would be removed from Willamette River: 800,000 million cubic yards.
- Number of tractor trailers that could fill: 8,000.
- Acres of wetlands to be filled with dredged materials: 38.
- Amount of sediment requiring removal over a 20 year period following deepening: 8 million cubic yards.
- Cost of potential damage to the natural environment and its economic resources: No answer provided by the Corps.

## Dredging & Buried Toxic Materials

When the river bottom is disturbed, as in dredging, sediment and toxic pollution are re-suspended into river water. Dredging also causes sediments to move along the river bottom. The deeper the dredging, the greater the erosion that takes place on the river bottom, from the water's edge to the dredge cuts. This may result in uncovering previously covered toxic wastes.

Clean-up of contaminated sediments in a working harbor requires coordination between clean-up activities, annual channel maintenance dredging projects, and other waterfront construction activities. If not carefully coordinated, these projects conflict with one another and even result in recontamination of already cleaned-up areas.



## What Do We Know About the Contamination?

Studies conducted by DEQ and EPA reveal the presence of over 50 toxic contaminants along a stretch of the lower Willamette, from the Broadway Bridge to its confluence with the Columbia. DEQ has identified 17 industrial sources of high toxic levels. According to the Corps' standards, the sediments removed from the Willamette's navigation channel have always tested clean for in-river disposal, but the Corps mixes the clean and contaminated parts of dredged material before testing it for contaminants.

## Key Questions Remain

- Considering the increased use of 50 draft vessels in the commercial shipping vessel industry, how much will three more feet really get us? Situated 115 miles inland, Portland will *never* be a deep water port.
- Will DEQ adequately modify proposed dredging projects to meet the increased concerns surrounding toxic sediments? The report offers no assurances except DEQ's word.
- When you combine the 800,000 million cubic yards of dredged material from the initial construction of the deeper channel with all the dredged material from the associated deepening of private berths along the harbor, one must ask, Where will all this material go?
- What happens if the river becomes listed as a federal Superfund site? It is the Corps' policy not to dredge within Superfund sites. If EPA assumes responsibility for the clean-up through its Superfund program, the Corps will back off its plan to deepen the Willamette channel until the area is cleaned up.
- Will the Corps be allowed to deepen the channel before adequate sediment testing and clean-up is done? The report includes the Corps deepening plan with other planned projects that have reached an advanced stage of development. DEQ's end date is 2002, the very same year that construction is to commence on the deepening project.

*This and other fact sheets produced by Northwest Environmental Advocates were produced under a public outreach grant from the Oregon Department of Environmental Quality. The opinions expressed are those of NWEA and are not intended to reflect the views of the granting agency.*



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