

## Columbia Slough Sediment Update

### Introduction

This fact sheet provides an update on recent sediment investigation and cleanup work completed by the Oregon Department of Environmental Quality on the Columbia Slough in NE Portland.

Cleanup and investigation of slough sediment, or the mud at the bottom of the river, has been made possible by funds DEQ [obtained through settlement](#) with approximately 25 parties in the Columbia Slough watershed for liability associated with their potential contribution to sediment contamination in the slough. The sediment investigation and cleanup actions are consistent with the final cleanup approach, officially known as the Record of Decision, for the Columbia Slough.

In addition to settling liability for sediment cleanup costs, DEQ, in collaboration with Oregon Department of Fish and Wildlife, developed an option for settling state Natural Resource Damages associated with contaminant-related impairment of the Columbia Slough beneficial uses. The payments are dedicated to habitat restoration within the slough watershed.

### Background

Development along the slough resulted in the accumulation of a variety of contaminants in slough sediments, some of which bioaccumulate and have also been found at unhealthy concentrations in fish tissue collected from the Slough. In 2005, the DEQ issued a final cleanup plan for the Columbia Slough that described the framework for cleanup of sediment contamination in the slough. The three primary components of the sediment cleanup approach are:

- Reducing sources of upland pollution
- Cleaning up individual sediment sites
- Long-term monitoring

There are currently over 30 active cleanup projects in the Columbia Slough watershed. These projects are in various stages of investigation or cleanup. A number of parties have resisted conducting site-specific Columbia Slough sediment investigations due to concerns that DEQ would hold them responsible for investigation and cleanup of contamination

caused by others. Investigation and cleanup of contaminated sediments is difficult to implement using a site-specific approach without costly litigation because of intermingled liability among multiple potential contributors to slough contamination through stormwater and wastewater discharges, bank erosion and other methods.

To address this issue, DEQ created a process through which parties can settle potential Columbia Slough-related liability with the State of Oregon by paying an amount, based on number of site outfalls and other site information, into a fund that DEQ can use to address the sediment contamination. DEQ also requires each facility to complete necessary upland cleanup and associated control measures under existing agreements with DEQ so that slough sediment does not become re-contaminated.

DEQ uses some of this fund to conduct sediment studies, such as the one in a priority segment of the Lower Columbia Slough in 2009 (<https://go.usa.gov/xsQvF>) and in the Whitaker Slough in 2011: <https://go.usa.gov/xsQwc>.

DEQ also contributes Natural Resource Damages funds to habitat enhancement projects within the Columbia Slough basin, such as placing engineered log structures in the slough to increase shelter for juvenile salmon and improving local park natural spaces.



*Engineered log structures in the lower Columbia Slough*



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## Recent DEQ-Led Work

DEQ is leading the work below using settlement funds discussed above.

### Lower Columbia Slough Sediment Sampling

In 2020, DEQ's contractor conducted sediment characterization at two locations in Lower Columbia Slough; one area near I-5 and one area adjacent to Moore Island. The work included further refinement of sediments that may require future remediation and sediments that were not previously well characterized, respectively.



*Sediment sample core from the Lower Columbia Slough*



*Wildlife along the Columbia Slough*



*Lower Columbia Slough near Pacific Carbide*

### Pacific Carbide Cleanup

Pacific Carbide, located in the Lower Columbia Slough, was developed in the 1940s and operated as a calcium carbide manufacturing plant until 1987. Up through the 1970s, significant amounts of waste material containing PCBs, PAHs and calcium entered the Slough through discharge pipes and Slough bank failures. Under DEQ review and approval, Pacific Carbide completed cleanup work in the upland in 2008. The upland cleanup work addressed stormwater as well as impacted upland soil. Sediment characterization occurred 2009 through 2016 to determine nature and extent of contamination within the Columbia Slough. DEQ is currently designing the remedy consistent with the Columbia Slough cleanup approach.

### **For more information:**

For information on these actions and the Columbia Slough sediment project in general, go to [ordeq.org/columbiasloughcleanup](http://ordeq.org/columbiasloughcleanup).

### **Alternative formats**

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email [deqinfo@deq.state.or.us](mailto:deqinfo@deq.state.or.us).