



Fact Sheet

Columbia Slough Cleanup near Moore and Wright Islands

Introduction

This fact sheet provides an update on recent Oregon Department of Environmental Quality-led Columbia Slough cleanup activities adjacent to Moore and Wright Islands and the Pacific Carbide and Alloy, Inc. facility located at 9901 North Hurst Ave. in Portland. You can get more information about and see documents related to this site on DEQ's [Environmental Cleanup Site Information Database](#) and [Columbia Slough Story Map](#).

Background

Historical industrial and agricultural use, going back to the middle of the 20th century, led to high levels of contamination found in Columbia Slough sediments today. In 2005, DEQ issued a cleanup plan, called a Record of Decision, for the Columbia Slough. The cleanup plan describes the framework for cleaning up sediment contamination in the slough. The primary components of the cleanup plan are in-water cleanups of sediment hot spots, source control and monitored natural recovery. Contaminated sediments adjacent to Pacific Carbide represent an in-water cleanup that must be addressed as part of the Columbia Slough cleanup plan. Read the [full cleanup plan](#).

Pacific Carbide was developed in the 1940s and operated as a calcium carbide manufacturing plant until 1987. Pacific Carbide manufactured calcium carbide by combining quick lime, calcium oxide, and coke, a solid carbon source with high concentration of polyaromatic hydrocarbons. Pacific Carbide transferred the generated waste slurry to settling basins constructed adjacent to the Slough bank. Prior to and during the 1970s, significant amounts of waste material entered the slough through discharge pipes and from one or more catastrophic failures of the slough bank adjacent to the settling ponds.

In 2003, Pacific Carbide entered DEQ's Voluntary Cleanup Program. Between 2003 and 2007, Pacific Carbide conducted upland soil and in-water sediment sampling to delineate the nature and extent of the contaminants at the site, which primarily included calcium, or lime, and PAHs. DEQ later identified polychlorinated biphenyls as contaminant of concern.

In 2013, Pacific Carbide entered into a Consent Judgment with DEQ to implement an upland soil remedy and pay into the Lower Columbia Slough settlement account to address the in-water sediment contamination. In 2015, Pacific Carbide completed the upland work, including excavation and capping at the site, and source control for the in-water remedy. Since 2015, DEQ took over the in-water cleanup effort as a part of the 2013 agreement with Pacific Carbide. DEQ has conducted investigations to further define the extent of PCBs, PAHs and lime in the slough. DEQ determined that the Pacific Carbide sediment contamination extends about three acres in the Columbia Slough.

Recent work

In 2022, DEQ completed a 90% Remedial Design Report, which refined the in-water cleanup. The remedial design consists of a reactive core mat cap covered by fish-friendly gravel armoring and sand habitat layer. A thin, granulated activated carbon-amended sand layer will be placed in select areas outside the reactive core mat cap. For flood mitigation, a portion of the Columbia Slough bank will be laid back and revegetated with native plants. This work will also remove contaminated bank soils and improve bank habitat.

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The in-water remedy will immediately reduce PCB concentrations by 86% in impacted Columbia Slough sediments and prevent toxic impacts from the lime deposit to benthic organisms. Over time, the action will reduce PCB bioaccumulation into fish tissue.

In 2023, a one million dollar EPA Brownfield Cleanup Grant was awarded and will provide additional funding for the in-water remedy construction and community engagement.

Next steps

Next steps include federal, state and local permit review and finalizing the Design Report. The DEQ-led construction will consist of a two-phased approach. The first phase will prepare the bank soil removal area in winter 2024 by removing vegetation before bird nesting occurs in spring and prior the bank removal. The second phase is in-water cap construction and bank removal, which is planned for summer 2025. Bank soil stabilization and monitoring will occur between phases. DEQ will provide an updated timeline when available.

For more information

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