

Columbia Slough Source Control Program Assessment and Development: Managing Short-Term Targets to Achieve Cleanup Objectives

Sarah Miller (miller.sarah@deq.state.or.us), **Heidi Nelson** (nelson.heidi@deq.state.or.us), and Kevin Parrett (parret.kevin@deq.state.or.us) (Oregon Department of Environmental Quality, Portland, OR, USA)

Background/Objectives. The Columbia Slough (Slough) is an approximately 31-mile urbanized waterway located in Portland, Oregon. Surface water and sediment in the Columbia Slough waterway have been contaminated with a variety of hazardous substances such as PCBs, pesticides, and metals over the past 100 years by industrial, commercial, and agricultural facilities. The Oregon Department of Environmental Quality (DEQ) leads the cleanup activities within the Columbia Slough. DEQ established the cleanup objectives for the Columbia Slough in 2005, which include: 1) controlling sources of contamination entering the Slough, 2) actively remediating areas of significant sediment contamination, 3) monitoring sediment and tissue concentrations to evaluate natural recovery, and 4) modifying the approach as new information becomes available. DEQ works towards Slough cleanup objectives with the responsible parties (RPs), which include private landowners and several state and local agencies. Significant progress has been made towards cleanup within the Slough, although source control has not been achieved completely. DEQ communicates clear short-term source control targets to the RPs and manage the source control priorities in the Slough as new data is acquired, varying approaches to source control are implemented, and as new funding options become available.

Approach/Activities. DEQ routinely communicates long-term cleanup objectives for the Columbia Slough Waterway to the RPs and other stakeholders working within the Slough. DEQ relies on RPs to implement source control measures at their facilities along the Slough. Each site is evaluated independently and therefore, the approach to source control can vary greatly. DEQ utilizes the strengths within the department to help guide the RPs through assessing and developing a source control plan. Once implemented on an individual basis, the information is tied back into the ongoing sequence of long-term efforts to improve environmental conditions in the Slough. Throughout this process, DEQ harbors an ethic of participating RP/ inter-agency teamwork, and adjusts the short-term priorities to continue to make advances towards the objectives in the Slough.

DEQ's management process includes: 1) utilizing the most recent data to identify the highest-priority areas to target source control; 2) developing and communicating short-term targets and receiving input from other agencies and stakeholders; 3) communicating the short-term targets to RPs; 4) working with the individual RPs to implement an appropriate source control; and, 5) preparing Annual Reports that provide updates for the ongoing work within the Columbia Slough.

Results/Lessons Learned. Achieving source control for the Columbia Slough is an on-going process that requires clear communication and coordination between many RPs, state and local agencies and other stakeholders. The short-term targets must be flexible to allow for refinement on an individual site-by-site basis in order to keep the project moving forward to achieve the long-term cleanup goals.