THE COLUMBIA RIVER ESTUARY STUDY TASKFORCE

Crane/Domeyer/Willow Bar Feasibility Analysis & Initial Designs

Columbia County, Oregon

Google Earth

The sites provide off-channel habitat to endangered anadromous species, crucial for rearing robust salmonid populations

The removal of a failing water control structure, and the restoration of floodplain and intertidal habitat help improve water quality, wetland function, and connectivity in three sections of an important Pacific Northwest Wildlife Area.

Bordered by the Willamette River to the south, the Columbia River to the east and Multnomah Channel to the west, Oregon's Sauvie Island Wildlife Area supports a biologically diverse assemblage of birds, mammals, reptiles, and amphibians, as well as numerous species of fish and plants. In an effort to restore estuary habitat critical to the recovery of threatened and endangered salmon species utilizing the Columbia River Estuary, the Columbia River Estuary Study Taskforce (CREST) and the Oregon Department of Fish and Wildlife initiated a project to restore three sites in the Wildlife Area: Crane, Domeyer, and Willow Bar. All three sites had isolated wetlands which were sporadically connected, and one site had a failing water control structure.

Biohabitats, in partnership with Wolf Water Resources (w2r), helped develop restoration alternatives for expanding floodplain and intertidal habitat at the three sites. Phase I of the project included conducting a feasibility study, modeling, and preparing initial designs for the three site locations.

Biohabitats and w2r worked together with other members of the team to provide geomorphic context, hydrology and hydraulic modeling, alternatives analysis and cost estimates for all three sites. The design team worked with CREST to evaluate existing conditions and narrow down alternatives to provide a more cost effective and targeted modeling effort. This allowed the team to advance the designs, provide more accurate cost estimates for choosing final design alternatives, and maximize habitat benefits. Selected alternatives included constructed tidal channel connections, marsh scrape downs, and water control structure removal.

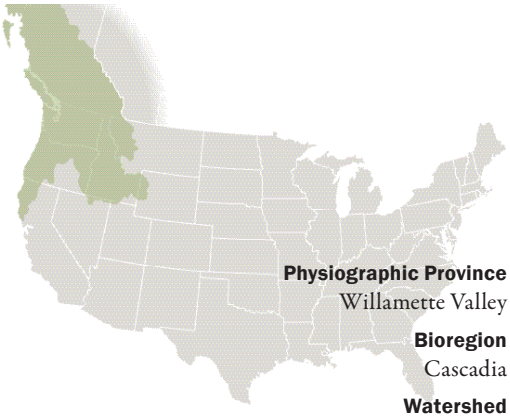
SERVICES

Feasibility Analysis
Design

conservation planning
ecological restoration
regenerative design

Biohabitats
CASCADIA BIOREGION

800.220.0919
www.biohabitats.com



Physiographic Province
Willamette Valley

Bioregion
Cascadia

Watershed
Lower Columbia River