COLUMBIA COUNTY SOIL AND WATER CONSERVATION DISTRICT

## Sage Property Levee Repair

Vernonia, Oregon





from top: During construction; Immediately after the levee was completed The Nehalem River in northwest Oregon is host to abundant salmonids. This wild river continues to behave like a typical coastal rainforest river, as it frequently accesses its floodplain. Columbia County Soil and Water Conservation District (SWCD), working in coordination with the Oregon An emergency flood protection berm provides security to a rural resident of the wild Nehalem River Valley in the Oregon Coast Range.

State office of the Natural Resources Conservation Service (NRCS), received Emergency Watershed Protection (EWP) funds to aid private landowners in Columbia County. Biohabitats was contracted to reconstruct a flood protection berm on private property that eroded and breached during the December 2015 floods, threatening the Sage family residence and agricultural outbuildings.

Biohabitats worked with NRCS engineering staff and SWCD project managers to revise the initial design to provide greater flood protection while staying within the project permit conditions, budget, and schedule. Biohabitats facilitated an on-site design revision meeting, secured the specified material, prepared the site, deconstructed the existing failed berm, and installed a new berm to meet the geotechnical specifications set by the project plans.

The landowners were left with a much longer, higher, wider, and compacted berm than what was originally constructed on the site. The late fall timing of the project permit acquisition did not provide enough time for the 2016 inwater work period portion of the project. Biohabitats plans to return to the site during the 2017 in-water work period to install the bioengineered bank portion of the project, which includes engineered log jams and soil encapsulated lifts along the bank of the Nehalem River.

**SERVICES** Construction

conservation planning ecological restoration regenerative design



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