Spring 2023

SIUSLAW

WATERSHED COUNCIL NEWS

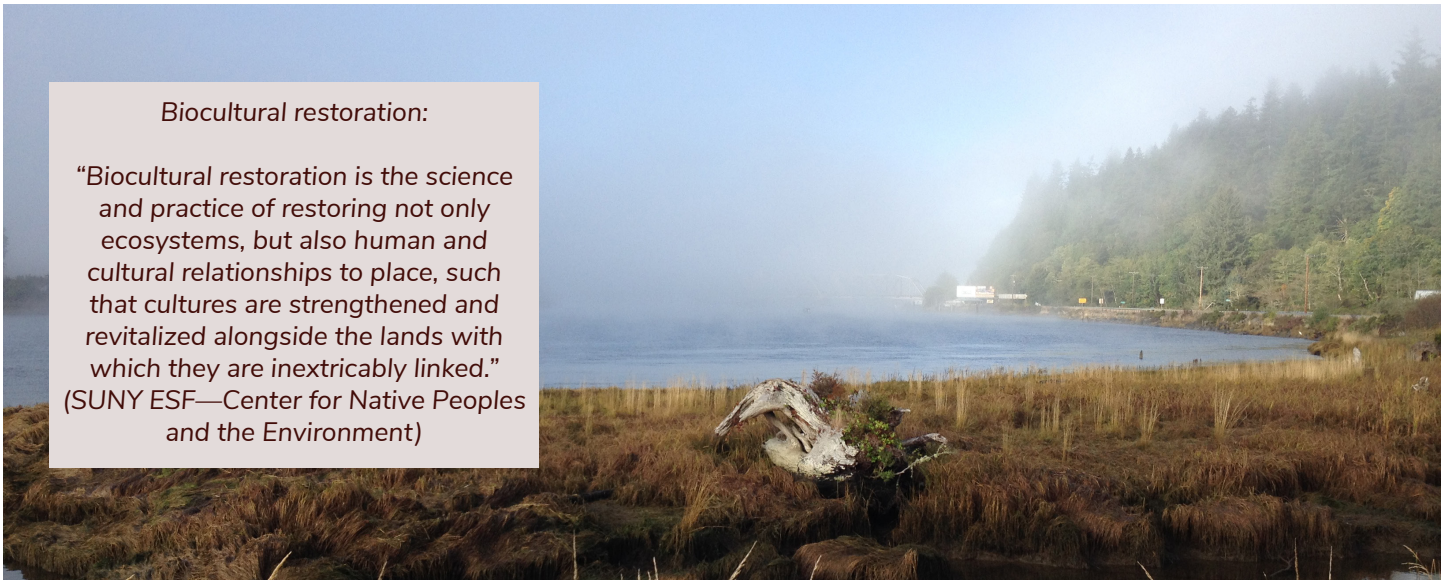
What's Happening in Your Watershed?

Restoring a Place of Change in the Siuslaw Estuary

Estuaries are places of richness, with abundant nutrients brought to them by the rivers that flow from the ridgetops and by the marine water pushed into the river valleys by the tides. They are dynamic places where minute-by-minute changes driven by the tides allow access to diverse habitat that supports many species, including young salmon as they spend time in the estuary, growing and adapting to be able to meet the challenges that await them in the ocean. The ecological riches of the estuary and their cultural importance have gone hand-in-hand for many thousands of years, and restoring tidal wetland conditions in the heart of the Siuslaw supports the physical and cultural health of all the communities that depend on the tidal wetland habitats.

Planning for the restoration of naturally functioning tidal systems to the 217-acre property has been a decades-long effort, led by McKenzie River Trust (MRT), the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians (CTCLUSI), and the Siuslaw Watershed Council (SWC). Over the years, it has been supported by many in the community, the state, and federally. In 2010, McKenzie River Trust acquired the property, which had been developed from tidal wetland to pasture in the late 1800s and early 1900s to support farming and ranching. Work toward a tidal wetland restoration plan for the property began immediately, and has taken more than a decade to get to where it is today. While it sometimes felt like we were not making progress, the extra time actually allowed partnerships to develop that have improved the design and scope of the project by incorporating elements of biocultural restoration into the conversation, and ultimately into the project's design.

We are now nearly ready to begin turning the project's design into an on-the-ground reality! CTCLUSI, in collaboration with MRT, SWC, and the Project's engineering firm, ESA, is leading the effort to complete the necessary permitting and the contracting process for implementation.



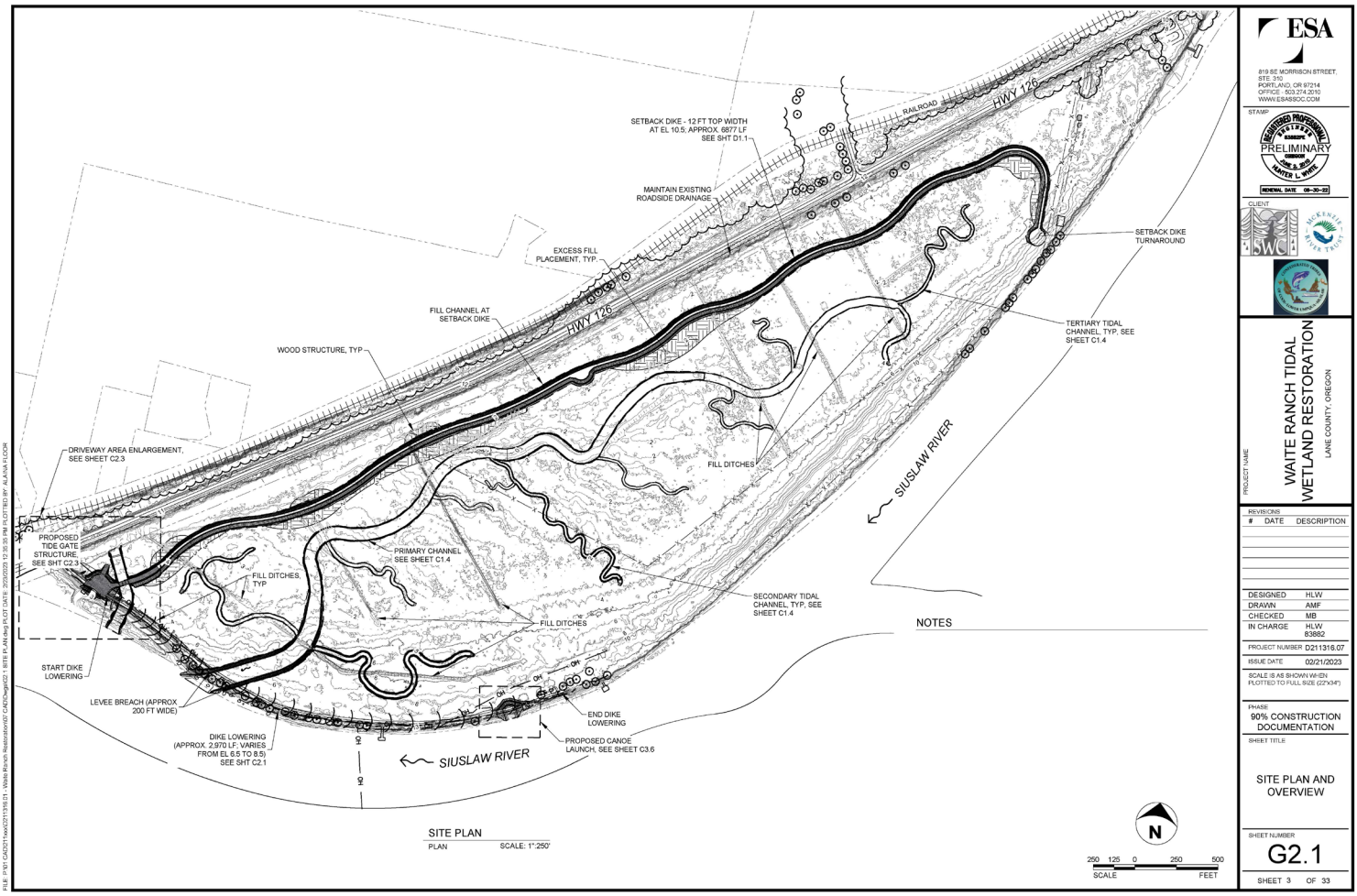
Biocultural restoration:

"Biocultural restoration is the science and practice of restoring not only ecosystems, but also human and cultural relationships to place, such that cultures are strengthened and revitalized alongside the lands with which they are inextricably linked." (SUNY ESF—Center for Native Peoples and the Environment)

The first season of implementation will begin this June (2023) and will continue into September. In the first season, all of the work will take place in the interior of the site, which will still be protected from tidal water by the levees that exist between the property and the river. A berm will be constructed along the length of the project, parallel to Highway 126, to allow tidal water to move on and off most of the property without impacting Highway 126 and neighboring properties. Existing linear ditches will be filled. New tidal channels will be dug throughout the property to help conduct tidal flow into and back out of the site. Large wood will be placed throughout the project. Work will be paused after the first season to let the newly constructed berm settle into place, and because it will be too wet on the site to work through the winter.

The second season of implementation will begin in Spring 2024 and continue through September. It will include work on the interior of the site to finish the berm along the highway and to install a tidegate that will allow a controlled amount of tidal flow, and the fish and other critters that travel with the tides, to travel back and forth through the berm. As the interior work wraps up, we will begin lowering part of the existing levee between the river and the property, so that at high flows and high tides, water will be able to flow onto the site. We will create two access points for canoes to enable site access for traditional stewardship activities. Finally, we will excavate the mouth of the interior tidal channel, connecting the new tidal channels to the river. Tides of all levels will once again flow onto the property through this channel, with the twice-daily rhythm that builds and maintains estuarine habitat.

After all of the earth-work has been completed, we will focus on revegetating the site with species native to the Siuslaw Estuary and with a focus on species that have cultural significance for CTCLUSI, including species valued as First Foods and as natural materials for tools, medicine, and ceremony. Plant communities in estuaries change based on small differences in elevation; the elevation determines how often that point on the land is inundated by tidal and riverine water. This property will have bands of elevation that will support several different tidal wetland plant communities, including tidal marsh dominated by sedges, crabapple shrub swamp, and spruce swamp. We also expect to see strong natural recruitment of native species, from dormant seed already on site as well as seed brought in on tidal water.



While all this work happens, you can expect to see a very active construction site. A restoration project like this one requires excavation, construction, and transport of large amounts of soil and other materials. During the two seasons of construction, there will be a lot of disturbance and bare earth. This is a sight that people often find discordant with the idea of restoring natural systems. It can help to consider that similar levels of disruption were necessary to convert the property from the tidal wetland habitats that were there for thousands of years to the pastured farmland of recent times. Taking measures to restore natural processes to the property requires serious disruption to the existing conditions. The project's partner organizations each have extensive experience with similar floodplain restoration projects where we have seen how quickly the land responds once natural systems have been restored. As a result of that experience, we are confident that the disruption of the project is temporary and that the positive ecological outcomes of the project will begin being realized immediately after construction has been completed.

When the restoration construction work has been completed, the natural forces of the estuary will take over on more than 200 acres of diverse estuarine habitat. River and tidal water will carry nutrients onto the property that will feed young salmon as they grow and change. It will bring the sediment that new sedges will establish in. Shorebirds will find mudflats to forage on as they migrate. It will be able to accrete sediment that will help it adjust to sea level rise, and it will store carbon under layers of winter sediment. This property will once again be a dynamic place that will interact with the forces around it, both supporting and being supported by all the creatures that call it home.

Mizu Burruss, Project Manager

Siuslaw Watershed Council Mission Statement

SWC supports sound economic, social and environmental uses of natural and human resources in the Siuslaw River Basin. The Council encourages cooperation among public and private watershed entities to promote awareness and understanding of watershed functions by adopting and implementing a total watershed approach to natural resource management and production.

Native Plant Distribution Recap

We are celebrating another successful year of the Siuslaw Watershed Council's longest running program—Native Plant Distribution (NPD). This is the 24th consecutive year of the program, which was first held in 2000. In recent years, with the help of our partners and volunteers, the Council now gives away approximately 10,000 plants annually. This program has many contributing factors in the health of the Siuslaw Watershed and Coastal Lakes. Providing shade along streambanks, creating habitat for fish and other wildlife, promoting biodiversity, combating invasive species, and improving bank stability enhances the ecological value of the participating landowners' properties.

This year SWC distributed 8,986 trees and shrubs and had 121 participants, with 38% of them being new recipients. It really brought me joy seeing all of our returning landowners and meeting our newest stewards this year. In January and February we had over 20 volunteers helping with different tasks, from picking up plants at nurseries, to driving orders to our different distribution sites, and--our biggest task--assembling orders the day before distribution. It really is one of my favorite days of the year. Not only are we doing important work, but we get to make new connections; people are laughing and sharing knowledge and a good meal together. Overall, this year's event went very smoothly, including the day of distribution. This is thanks to help from volunteers, our board of directors, and our staff. If you were not able to join us this year, don't worry, you will have another chance next year!

We would like to say thank you to everyone who made NPD 2023 possible, including the USFS Coast Range Stewardship Fund, Roseburg Resources, Bonneville Environmental Foundation, and all of our many participating landowners and volunteers.

Britnee Church, Project Manager and Crew Lead

Seasonal Viewsheds Within Our Watershed

A contrasting viewshed exists between seasons in the Siuslaw Watershed. Depending on the time of year, deciduous plants alter the views we see every day by virtue of the absence or presence of leaves. Our view of the landscape changes; the contours and topography of hardwood-dominated forests are revealed, while coniferous forests remain seemingly unchanged. Our viewshed, or view of an area, is directly impacted by the diversity within our forests.

Our perception of natural areas changes with the season, but the ecological services gained from a diverse forest ecosystem remain the same. Wintertime highlights the Douglas-firs, hemlocks, spruces, and cedars of our viewshed – but come summertime – maples, alders, and salmonberry are brought back into focus. Our attention is often drawn to big leaf maple, with the unrivaled size of its leaves, but

the canopy also offers essential ecological services, like shading out invasive competitors, cooling our streams to promote salmon rearing, and retaining soil moisture. The seasonal viewshed is ultimately a reflection of plant diversity and ecosystem function, and therefore a reflection of the ecological health within the entire Siuslaw River sub-basin.

The Siuslaw Watershed Council is hard at work to increase the ecological diversity of riparian zones – from public lands along North Fork Siuslaw River and Taylor Creek, to private landowners' properties within Lane County. As the restoration crew works to plant a wide array of native trees and shrubs ecological function will improve, and hopefully so will your view, over time. Springtime illuminates the changing viewshed, but those changes in our observations are accompanied by changes in ecosystem function – we will improve both by managing invasive plants and implementing planting plans.

Daniel Patton, Restoration Technician

Spring Activities

Siuslaw Estuary Cleanup
April 29th, 10:00 AM–2:00 PM
Port of Siuslaw, Florence
Register @ siuslaw.org/events

Bird Tour with McKenzie River Trust
May 12th, 8:00-10:00 AM
Waite Ranch, Cushman
Register @ mckenzieriver.org/events

Forest Succession Tour & Picnic
June (date TBA)
Private Residence, Deadwood
Register @ siuslaw.org/events

Our community activities are supported by funds from the Oregon Department of Fish and Wildlife (ODFW) through the Oregon Conservation and Recreation Fund (OCRF)

SIUSLAW WATERSHED COUNCIL

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