Fall 2024

SIUSLAW

WATERSHED COUNCIL NEWS

What's Happening in Your Watershed?

The Dorff-Nichols-Steinberg Project at Upper Deadwood Creek

With summer comes long, hot days for the SWC field crew. We relish the chance to interrupt the routine with some time knee to chest deep in a creek. As it so happens, we were recently asked by the Forest Service to aid in their efforts to relocate aquatic organisms. So as the fish signal shone in the night sky, we drove out to the Dorff-Nichols-Steinberg (DNS) project at Upper Deadwood Creek, donned our waders, dodged all the massive excavation equipment, plunged into the water, and began netting fish—the goal being to relocate trapped aquatic life in the project area to a safe and secure location.

What the DNS project aims to do is restore floodplain connectivity by filling in the existing channel and bringing down the grade of a large swath of adjacent land. If you were to visit pre-excavation you would find a sight similar to many valleys in our area; a channelized creek pushed all the way to one side of the valley. Years ago the people who colonized these valleys modified the flow of water to drain wetlands, making the land more suitable for settling and raising livestock. While such modification has many repercussions, perhaps the most harmful is the loss of feeding and reproductive habitat for fish.

As we saw, once the uppermost section of stream was "plugged", water immediately began to disperse over the project site. Try picturing quiet little fish "neighborhoods" forming throughout the newly flooded valley, where before the population was confined to the busy "highway" of the channelized creek.

Many organisms call Deadwood Creek home. This includes various invertebrates (juga snails, larvae of stonefly, dragonfly and caddisfly, water striders, and diving beetles), and many species of fish, including sculpin, dace, lamprey, trout, as well as the threatened Oregon Coast coho salmon fry. Several of these species will migrate to the ocean and return later to spawn in the same freshwater pools they reared in. The crayfish were the stars of the creek. We fawned over them, big and small, and gave them all the name François. Shuttled over land and released by the bucketful, these fishy critters are the first recipients of a newly restored landscape. Best of luck, François!

The following values reflect the number of organisms salvaged from the project prior to the filling of the channel, but it should be noted that during the channel filling we salvaged a significant amount of aquatic life that we lacked the time to properly tabulate.

Coho: 1,482

Cutthroat: 95

Rainbow/Steelhead: 5

Sculpin: 883

Crayfish: 352

Dace: 368

Lamprey: 39

Trout Fry: 111

Salamander: 1

Newt: 1

Northern Pikeminnow: 1

Contributed by Adam Cook, SWC Crew Lead

Oregon Dunes Restoration Collaborative

For the last several months, staff at the Siuslaw Watershed Council have partnered with the Oregon Dunes Restoration Collaborative (ODRC) to schedule a series of planning meetings aimed at revitalizing the Collaborative going into 2025. Since 2014, ODRC has worked to save the Oregon Dunes through community action taking the form of volunteer mobilization, invasive species removal, public speaking programs, and collaboration with the United States Forest Service. And make no mistake, the Oregon Dunes do need saving.

Intentional non-native plant introduction in the 1900s was systematically enacted throughout the dunes to stabilize the shifting sands and prevent them from covering roads and property. European beach grass, Scotch broom, and gorse now cover broad swathes of historic dune ecosystem, altering the natural processes of dune formation and leading to the emergence of scrubland and forest where open sand and native dune plant communities once predominated.

ODRC has worked hosting countless events to remove invasive species and restore balance to the dunes, while spreading the word about this increasingly imperiled ecosystem. People from all backgrounds and walks of life care deeply about the Oregon dunes; as habitat for plants and animals, as a space for recreation ranging from hiking to four-wheeling, as a natural wonder, as a critical driver of local economies. While all may have different reasons for caring, ODRC seeks to harness the collective passion for the dunes to enact the work necessary to save them from being fully overwhelmed by invasive species.

Collaborative projects with buy-in from diverse community groups are critical in conservation work; any restoration plan will face challenges in the long-term without the support of the individuals who live in and around the affected area. Groups like ODRC are therefore of immense importance, bringing people together to find common ground and solutions that can be supported and enacted by all.

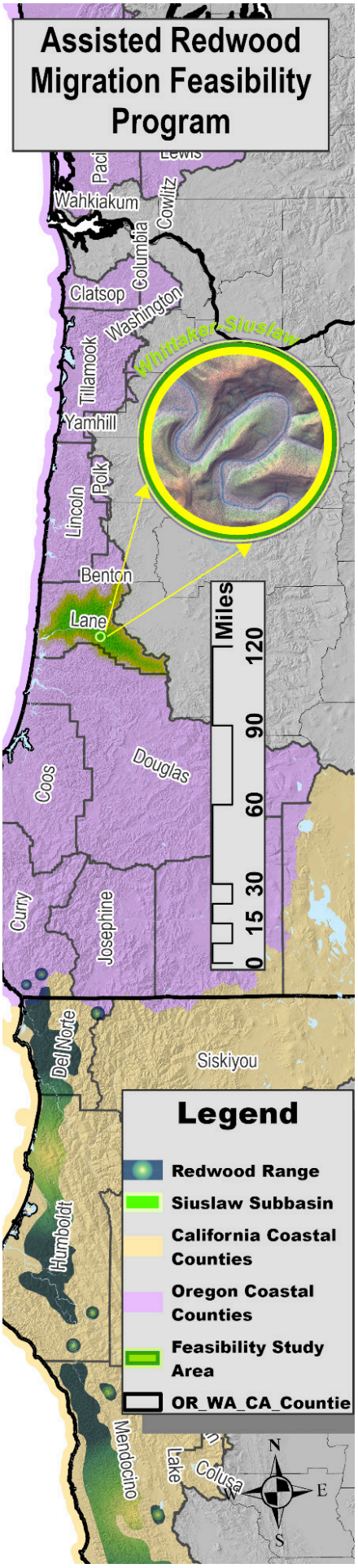
Contributed by Elijah Yager, SWC Project Manager

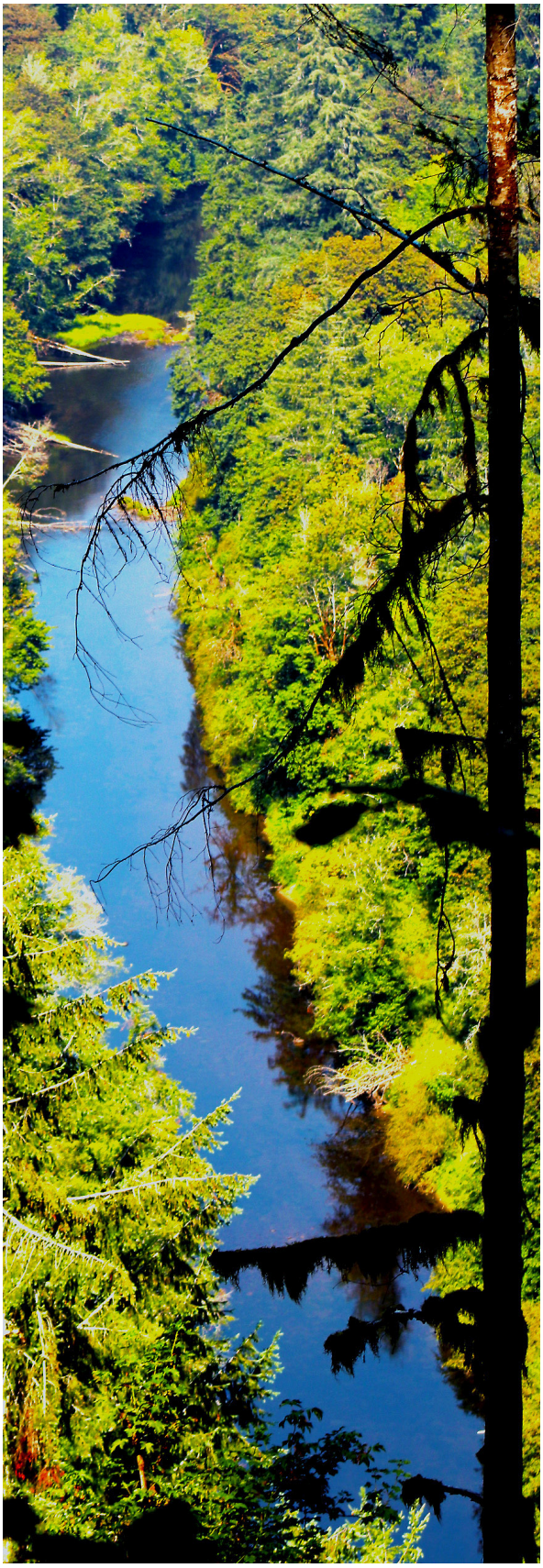
Building Climate Resilience in the Siuslaw Watershed

Mature coast redwoods stand tall, their immense trunks rising through the misted shadows surrounded by damp ferns and thick mats of moss. Adapted to environments with persistent fog, low-intensity disturbances, and limited water availability, redwoods exemplify resilience with lifespans spanning thousands of years. Yet, as the climate crisis intensifies along the Pacific Coast, we see increasing mean annual stream temperatures, dwindling precipitation, and more frequent, extreme weather events like ice storms and wildfires. These rapid changes driven by climate change necessitate adaptive management strategies to enhance resilience within the Siuslaw Watershed. By introducing trees with specific adaptations that fill multiple ecological niches into riparian buffers, we aim to enhance ecosystem services that improve water quality for streams feeding the Siuslaw River.

Redwoods are champions of survival—adapted to regenerate and endure environmental pressures. They possess superior shade tolerance when young, positioning them to be suitable for understory establishment and efficiently utilize fog to cope with drought. Their thick, fibrous bark shields them from fire, while serotinous cones ensure their repopulation in fire-impacted landscapes. Remarkably, redwoods can regenerate from basal sprouts after fire or mechanical damage—a rare ability among conifers. However, they do have vulnerabilities. Their shallow yet expansive root systems depend on the stability provided by surrounding trees, making them susceptible in loosely structured, sandy soils where the high water-retentive capacity of their wood can become a burden. Additionally, their ability to produce different leaf structures—ranging from water-capturing spikes to shade-tolerant needles—underscores their adaptability in dynamic environments, which helps compensate for their susceptibility to instability when growing in isolated stands.

As extreme weather events become more common, invasive plants will have more opportunities to exploit canopy gaps, especially if resilient native trees do not survive those events. This highlights the complexities and potential downsides of widespread redwood migration. Restoration practitioners, private landowners, and public agencies must carefully evaluate numerous factors when determining a species' suitability for migration. The decision must be grounded in the specific adaptive traits we aim to leverage, rather than solely on current or projected geographic distributions, as climate shifts alter native ranges much faster now than the gradual changes typically seen over millennia. Coast redwoods already exist in various parts of the Siuslaw Watershed, but expanding their presence as a climate adaptation strategy must rest on a robust scientific framework that assesses impacts at local, regional, and global scales. To guard against uncertainties in climate models and the risk of invasive plant proliferation, it is crucial to plant coast redwoods alongside native species to minimize their potential to outcompete healthy native trees, such as Douglas-fir (*Pseudotsuga menziesii*).





Establishing redwoods in tandem with other adaptable native species, like bigleaf maple (*Acer macrophyllum*), could foster a climate-resilient ecosystem capable of enduring the intense storms and challenges posed by climate change. Young coast redwoods are highly shade-tolerant, which opens the possibility of underplanting them in nitrogen-rich, and densely populated red alder (*Alnus rubra*) stands. This approach could simulate climate-adaptive forest succession, allowing red alder and riparian forests to coexist and gradually giving way to a more resilient forest capable of adapting to future conditions. By implementing our assisted redwood migration project within Siuslaw River-adjacent floodplains, we aim to gather valuable data on redwood establishment under different site preparation techniques that can be used as a reference for the Siuslaw Watershed and beyond. The insights gained from this effort will guide future adaptive management, ensuring that redwoods not only serve as symbols of our stewardship but thrive as pillars of resilience for our watersheds' future.

To achieve this vision, we need your support—whether as a landowner, a public agency, or an advocate for the environment. Your involvement can help secure funding, shape public policy on assisted migration, and ensure that these towering giants continue to inspire future generations. Together, we can build resilient forests that will stand tall in the face of the climate challenges ahead.

Daniel Patton, Resilience Ecosystem Strategies LLC

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 2025

SWC's longest-running program, the Native Plant Distribution (NPD), is just around the corner! If you're not already familiar, this annual event offers free native plants to landowners with property along the riparian areas of the Siuslaw Watershed or the Coastal Lakes in our service area.

Why plant native species? The benefits are far reaching. Native plants help reduce invasive species, support pollinator populations, and provide crucial habitat for salmon and other wildlife. Plus, restoring your land with these plants just feels good—it's a simple yet powerful way to make a positive impact on the environment.

The NPD program is open to all streamside and lakeside landowners and offers a great opportunity to begin enhancing your riparian property or continue the work you've already started. If you're unsure about the current plants on your property or need guidance on what to order, feel free to contact our office at 541-268-3044 or email nativeplants@siuslaw.org to request assistance from SWC's restoration technicians.

To the right is our anticipated 2025 plant list. While all species have been confirmed, please note that availability may vary due to unforeseen circumstances at the nurseries.

Volunteers Needed!
As a reminder, this program depends heavily on volunteers. We are currently seeking help with tasks such as picking up plants from nurseries, distributing plants, preparing orders, and more. Volunteering is a great way to get involved and make a positive impact on our community. If you're interested in lending a hand, please contact our office at 541-268-3044 or email nativeplants@siuslaw.org to sign up.

- **Sitka Spruce** (*Picea sitchensis*)
- **Grand Fir** (*Abies grandis*)
- **Douglas-Fir** (*Pseudotsuga menziesii*)
- **Western Redcedar** (*Thuja plicata*)
- **Incense Cedar** (*Calocedrus decurrens*)
- **Shore Pine** (*Pinus contorta*)
- **Black Cottonwood** (*Populus trichocarpa*)
- **Oregon White Oak** (*Quercus garryana*)
- **Bigleaf Maple** (*Acer macrophyllum*)
- **Black Hawthorn** (*Crataegus douglasii*)
- **Cascara** (*Rhamnus purshiana*)
- **Pacific Crabapple** (*Malus fusca*)
- **Bitter Cherry** (*Prunus emarginata*)
- **Blue Elderberry** (*Sambucus caerulea*)
- **Red Elderberry** (*Sambucus racemosa*)
- **Vine Maple** (*Acer circinatum*)
- **Twinberry Honeysuckle** (*Lonicera involucrata*)
- **Nootka Rose** (*Rosa nutkana*)
- **Mock Orange** (*Philadelphus lewisii*)
- **Snowberry** (*Symphoricarpos albus*)
- **Douglas Spirea** (*Spiraea douglasii*)
- **Red Flowering Currant** (*Ribes sanguineum*)
- **Pacific Ninebark** (*Physocarpus capitatus*)
- **Pacific Dogwood** (*Cornus nuttallii*)
- **Ocean Spray** (*Holodiscus discolor*)
- **Salal** (*Gaultheria shallon*)
- **Serviceberry** (*Amelanchier alnifolia*)
- **Willow** (*Salix spp.*)
- **Oregon Iris** (*Iris tenax*)
- **Common Camas** (*Camassia quamash*)
- **Coastal Strawberry** (*Fragaria chiloensis*)
- **Wapato** (*Sagittaria latifolia*)
- **Western Columbine** (*Aquilegia formosa*)

Support the Program

For those interested in supporting the program through donations, you can do so by scanning the provided QR code. Your contributions help ensure the continued success of the Native Plant Distribution program. Thank you for your support!

Contributed by Britnee Church, SWC Project Manager

Giving Made Easy

Thank you for your interest in the Siuslaw Watershed Council and the work we do restoring land and waterways, enhancing salmon habitat, providing fun and educational outdoor activities for youth, distributing and planting native plants, and hosting community events.

Our work helps preserve the Siuslaw's many recreational opportunities – fishing, boating, kayaking, hunting, foraging, hiking, or just sitting on the riverbank enjoying a sunny day.

Share your support of our continued efforts to steward the lands and waters of the Siuslaw and Coastal Lakes to benefit our communities, economy, environment, and future generations by making a gift of any size.

Check - mail your check to PO Box 422, Mapleton, OR 97453 or stop by our office at 10868 East Mapleton Rd.

Credit, Debit, or PayPal - visit our website at siuslaw.org to make an online donation.

Recurring Donation - check the box on our donation page to make a recurring monthly donation.

Donate When You Shop - our website contains information and links for the Fred Meyer Community Rewards and Market of Choice eScrip programs.

Facebook (Meta) - create your own fundraising campaign on behalf of SWC.

Give at Work - ask your employer about donation matching or workplace giving programs.

Call us at 541-268-3044 to learn more about the following giving programs:

Business Stewardship - a giving program for local businesses.

Stocks - donate stocks or mutual funds via our Edward Jones brokerage account.

Western Lane Community Foundation - make a donation or legacy gift to the Foundation's Siuslaw Watershed Council agency fund.

The Siuslaw Watershed Council is a 501(c)(3) nonprofit organization. Tax ID: 93-1234456.
Contributed by Linda Poppenheimer, SWC Financial Manager

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