

Introduction

The Restoration Process

Who's Got Time for That?

A core part of what we do at the Curry Watersheds Partnership is developing, implementing, and managing restoration projects. These projects can take many forms - from removing invasive weeds or planting trees in a riparian area, to embedding hundreds of logs into a stream bank or constructing entirely new aquatic habitats. No matter the size or type of restoration project, most all of them follow a similar process that often takes many years to complete.

In this edition of Curry Currents we want to pull back the curtain and share more about the restoration process; highlighting the amount of effort, partners, and in particular the time it takes to see this work get done. We'll cover the 4 common phases of a project while spotlighting one of our largest projects we've ever accomplished - the Sullivan Gulch bottomlands restoration project.







Phase 1 - Scoping

Every project starts as a dream. The scoping phase is where that dream starts to become reality.

Sullivan Gulch is a large portion of Cape Blanco State Park that's within the Sixes River floodplain. The park was a historic ranch before it was purchased by the State of Oregon in 1971, and portions of the ranch are still managed for agriculture today. A local rancher still runs cattle in parts of the park, and he was the first one to dream up this project in the mid-2000's when he recognized a particularly wet portion of one of the pastures had potential to be restored for salmon habitat. He shared that vision with OPRD and ODFW, neither of which had the capacity to take on a project like this. They collectively presented the idea to us, and we got to work figuring out how to make it a reality.

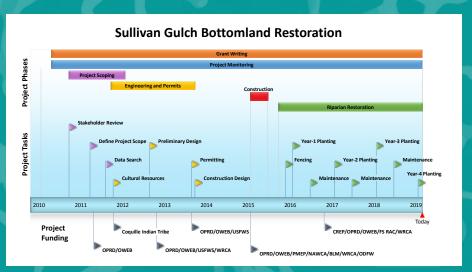
The scoping phase involves asking a lot of questions: What kind of project could be done here? What would the process look like? Who all would need to be involved? Is there grant funding available for something like this? Does it need to go through a permitting process? What would the landowner like to get out of this project? Etc. The more questions you can answer early the better. Thankfully we have decades of technical experience to anticipate and answer many of these types of questions. If your answers indicate a project seems feasible, and everyone's onboard, you can move on to the next phase.

Phase 2 - Technical Development

A good plan is key to success. The technical development phase is where that plan is created.

The Sullivan Gulch project was in development for over 5 years before any on the ground restoration work started. Those years included: refining what exactly the project would look like, working with engineers to design the project, working through state and federal permitting requirements, collaborating with Oregon Parks and Recreation Department, the rancher, and other interested parties, conducting an archeological survey with local tribes to ensure we weren't damaging or ruining any cultural resources, finding contractors who could implement the project as designed, all while going after over a million dollars in grant funding to pay for all of this work and what it would cost to put the project on the ground.

The technical development phase of a project is often the most time consuming. This is where all of your questions have to get answered, everyone that needs to be in the know gets involved, and all the details get ironed out. It requires a dizzying amount of collaboration and technical expertise, which grows exponentially with the size and complexity of a project. Our staff have experienced a wide array of projects over the years, and are able to use that experience to successfully navigate this complex planning process. Once your plan is in place and everything is ready to go, it's on to often the most exciting part of the process.





Phase 3 - Implementation

The on-the-ground work is where dreams become reality.

The Sullivan Gulch project went on the ground in the summer of 2015. In that one summer - 2,654 feet of stream channels and backwater pools were created, 24 acres of riparian and wetland habitats were planted with over 15 thousand trees and shrubs, nearly 400 large logs and root wads were installed as habitat structures, two bridges were installed, and the project area was fenced to keep livestock out. This work required the use of multiple crews and contractors, heavy machinery, and a lot of grit and ingenuity.

The implementation phase of a project is often the most resource and labor intensive. All of your planning, preparation, and coordination lead up to, in most cases, one summer of work. To add to the stress and hecticness, any work done in or around water must be done during the "in-water work period" - a window of time, usually July to late September or October, set by ODFW to minimize impacts to fish, wildlife, and habitat resources. These are the few months where all of earth gets moved, logs get installed, habitats get built, etc. Once a project does get implemented, it's usually immediately onto the next. Five other projects were implemented in the same year as Sullivan Gulch, all having to be done within the in-water work period. The juggling of multiple projects, many at different phases of the restoration process, could be another whole article, but it is worth pointing out that none of this work is done in a vacuum nor are there clear end-points.

Phase 4 - Post-implementation management

A project is not done in one season. It evolves as changes, as nature likes to do, and requires some level of monitoring and management over time to make sure things are going as planned.

We chose to highlight the Sullivan Gulch project, in part, to celebrate the 10-year anniversary of project implementation. While the bulk of the work happened 10 years ago, we are still out there on the ground today. Thousands of seedlings were planted during implementation, and more have been interplanted each year since to account for attrition. Many of those are caged to protect from predation. Those cages need to be monitored, sometimes replaced, and removed at some point. We also monitor plantings for competition to make sure they don't get overtaken and smothered by less desirable plant species. Speaking of those less desirable plants, invasive vegetation management is also part of the work to make sure those species don't become dominant at the site. We've also kept a keen eye on how the stream channels and aquatic habitats are evolving to make sure there's no potential concerns or issues with those.

Post-implementation management of a project can vary quite a bit. Small, one-dimensional projects may not require a lot of management or maintenance, especially if it is a common project type with well-known outcomes. Large, complex projects on the other hand may require a substantial amount of oversight, especially if it's a particularly unique project with a lot of unknowns. In restoration we aim to restore processes and functions of a healthy ecosystem. No ecosystem is static, and each one is unique. These projects are designed to evolve over time. We hope that the restoration we do leads to a healthy evolution, but we can never control every factor and there are always unknowns. This is why post-implementation management is so important.

Concluding thoughts...

If you work in an industry outside of restoration, did any of this process sound familiar to you? Restoration projects are unusual in how they mirror infrastructure projects in some ways, yet in other ways they are the polar opposite. Like infrastructure, they often require engineering, permitting, construction, labor, maintenance, and the work of many skilled professionals. Unlike most infrastructure, their main purpose is to enhance or repair natural ecosystems. Our society in many ways is still adapting to restoration as a science, profession, and economic contributor. This adds wrinkles of complications to an already complex process, especially when restoration is viewed through the same lens as infrastructure because that is the only lens available. We hope that will change over time, and it starts with everyone having a better understanding of the restoration process.

The fact that the Sullivan Gulch project is now 10 years old is leaving a lot of us at the office confused and questioning the concept of time. The amount of time and effort that goes into a project like this, from being a dream in a rancher's mind roughly 20 years ago to what it is today, makes one feel like every restoration project that happens is a small miracle. You won't find any CWP staff or partners calling themselves miracle workers, but hopefully now you have a better idea of the hard work they're all doing every day.





Local Board Meetings

Please contact us for information on how to join.



Curry Soil and Water Conservation District Last Tuesday of the month at 7:00 pm

Last Tuesday of the month at 7:00 pm at the Curry Watersheds Partnership Office.

Contact Liesl Coleman for more information: liesl.coleman@currywatersheds.org



Lower Rogue Watershed Council

Third Tuesday of the month at 5:30 pm at the Curry Watersheds Partnership Office.

Contact Kelly Timchak for more information: kelly@currywatersheds.org



South Coast Watershed Council

Third Monday of every odd-numbered month, rotating location between Port Orford, Gold Beach, and Brookings.

Contact Robbie Lascheck for more information: robbie.lascheck@currywatersheds.org



Gardens as Stepping-stone Habitats

February 19, 2025, 12pm-1pm (Virtual)

Free Online Seminar: Visit OSU Extension website to register

Urban and suburban gardens can significantly benefit wildlife and human health. This session will explore ways to maximize their potential by creating stepping-stone habitats for wildlife and restoring water, nutrient cycles, and vegetation diversity to enhance garden and community resilience.

Kelp, Sea Otters, & Urchins: Connecting & Possibilities

February 23, 2025, 2pm-3:30pm

A Talk at the Curry Public Library

by Nancy Treneman, Oregon Institute of Marine Biology.

The northeastern Pacific coast has supported kelp forests for millennia, providing habitat for diverse marine life. However, these ecosystems are now undergoing significant change due to kelp loss driven by physical and biological processes. This presentation will explore the past and future of kelp forests, the roles of sea urchins and sea otters, causes and consequences of their decline, and actions to protect nearshore ecosystems.

The District's 2023-24 Annual Meeting

March 25, 2025, 6:30pm

Curry Soil and Water Conservation District 29286 Ellensburg Ave., Gold Beach OR

Rogue River Cleanup - 20th Anniversary!

June 7, 2025

Come and clean up the Rogue River with us and celebrate 20 years of stewardship! To sign up and see more information, go to www.currywatersheds.org/rogue

REPORTS from FIELD

Lower Rogue Watershed Council

We continue with our long-term estuary restoration journey in the Lower Rogue River. Work in the estuary began long before my time here, initially led by landowners collaborating with their local watershed council and staff at the Oregon Department of Fish & Wildlife. This led to folks sitting around the table together, discussing ideas that could mutually benefit both the landowner and the watershed. Sometimes these conversations end before they start, sometimes they can take years and quite a bit of compromise on all parts, sometimes these projects take on new partnerships and grow, and sometimes these projects fall apart at the last minute. This is the true story of watershed restoration - these developing plans take a lot of time to nurture and grow, to build the trust and relationships needed to shape a successful project. Thankfully for the Rogue River Estuary's, this is a tale of investment, relationship-building, intentional care, and community involvement. This story is still unfolding, and we likely won't even see the full restoration story unfold in our lifetime.

We are finally entering the implementation phase of the Freeman Rock Rearing Habitat Enhancement, and these are exciting times for sure! We are fundraising for the project elements, which includes excavation to create two new slough channels, large wood placements to increase cover for fish and roosting for birds, creation of alcoves and tributaries for added complexity and increasing macroinvertebrate (bugs) production, and revegetation for shading and adding important organic matter and future large wood recruitment. This project has been building since the early 2000's, and here we are 20 years later finally seeing it through. This will be the largest project that the Lower Rogue Watershed Council has completed to date. We see this as a monumental project, where we have the opportunity to create NEW acres of estuary habitat, which is really hard to come by in this day and age. Stay tuned - we plan to reach out to our community in the spring/ summer of 2025 so that we can share our hopes for the ecological, economical, and social benefits of this estuary work with you!







Invasive blackberry negatively impact riparian function. These blackberries will be removed from the riparian area along Willow Creek and replaced with native vegetation in the winter of 2026.



Willow Creek

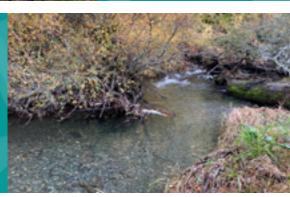
Long Term Restoration

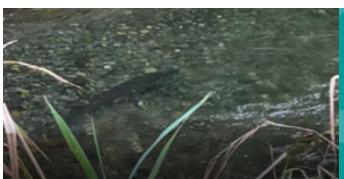
Preparations continued this past summer for the next round of riparian and instream habitat improvements in lower Willow Creek. The SWCD and South Coast WC have been working with agricultural landowners to improve water quality and habitat conditions in Willow Creek for approximately 25 years. As habitat conditions have evolved over time, so have the opportunities to continue making improvements. In the summer of 2025, additional large wood structures will be placed in pool habitats where cover for fish to hide is currently lacking. Additionally, invasive Himalayan blackberry will be removed and native riparian trees and shrubs will be planted in the winter of 2026. Maintenance of the vegetation treatments will continue through the summer of 2029. These long-term efforts in Willow Creek have brought infrastructure to the ranches to improve livestock management (e.g., offstream water systems, fencing, bridges, etc.), helping the cooperating agricultural operations achieve compliance with the Curry County Agricultural Water Quality Management Plan, added complexity to stream habitat, improved riparian function, and some impressive numbers of fish are returning to Willow Creek to spawn!



An area of Willow Creek that is devoid of the complexity that provides good habitat for fish. Log structures will be placed in this section of stream in the summer of 2025.

An area of Willow Creek that has been treated with large wood and riparian plantings to improve fish habitat and water quality. The logs were placed in 2017 and the riparian vegetation is a mix of hardwoods and conifers planted approximately 25 years ago.





An adult Coho salmon in a segment of Willow Creek that has been the focus of several restoration projects over the last 25 years

The Oregon CREP enabled the grazing lease holder to contribute to the fencing and planting along the newly restored Sullivan Gulch channels



The Oregon Conservation Reserve Enhancement Program (CREP) projects that receive Curry SWCD/Curry Watersheds Partners technical assistance vary widely by size and complexity. The critical component all of them share is cooperation by willing landowners.

South Coast Watershed's multi-phase cooperative Sullivan Gulch project incorporates the grazing lease holder's CREP contract, with planning interwoven by Curry Watersheds Partners into the more complicated instream restoration, funding, and permitting. CREP enabled the grazing lease holder to contribute matching funds to help establish and protect streambank vegetation.

Other CREP projects stand on their own to improve ranch operations and enhance habitat. Facing the loss of his best herding dog and familiar with CREP from previous riparian forest projects, the manager of one large Langlois Mountain ranch prioritized fencing steep seasonal drainages this year and made a quick call to the USDA office in Coquille. The family worked with us to develop a plan and budget, then built the fence just before fall rains began. They will plant native trees and shrubs this winter, and the ridgetop fence will save hours of herding stray sheep on ATVs and on foot for years to come.





Smart fence placement is essential to moving livestock across rugged hillside properties and to protecting riparian corridors. The cost of fencing is covered by CREP incentive and cost-share payments, but the time and labor saved will provide even more value in the coming years.



Sanaging Vices The Forever War

When it comes to weeds and managing invasive vegetation, there are no short cuts to success. Although you are in it for the long haul, gauging your success can often be based on short term goals and small battles won in the everlasting weeds war. Having a clear goal in mind comes with many considerations. Depending on the size of the infestation or weed site location, you can determine whether eradication is an option or intense management is your indefinite future. Even if you're only dealing with one or two plants, they are most likely connected to a much larger problem in the area. While eradication should be the ultimate goal with weeds, it's not often feasible with some of our widespread invasive species.

Managing outlier sites has become one of our best strategies when tackling some of these widespread species on the south coast. Also referred to as "Early Detection Rapid Response" or EDRR, outlier weed management is where containment begins. The EDRR/outlier weeds strategy is similar to managing wildfire, putting out the small fires before they become out of control as well. Gorse is a fine example of a widespread weed that is out of control in some areas, but is trying to gain a foothold in many other areas throughout the county.





We have had great success managing outlier sites with our Gorse WARS project. Some of these gorse sites have been monitored for several years. Initial treatments generally take out the mature plants and eliminate seed production. The need for follow up treatments will be determined by how many seed sets the original site produced. A mature gorse plant can produce hundreds to thousands of seeds each year. An old growth gorse stand will ensure gorse management is also in the future for generations to come. Catching gorse or any invasive weed at an early stage before it goes to seed is of great importance in your long-term engagement.





Ultimately, having a long-term management plan with a definitive outcome will add to the success of your project. Not only having a clear picture of how you will tackle the management of weeds, but what will become of the land you are managing. Often times the removal of one weed can just become an invitation for the next. A working landscape is the best-case scenario when battling a major infestation. Whether that be forestry or livestock management, establishing an effective land use practice to help with weeds removal can be your greatest ally. Restoring an area to its natural state can often be the most challenging when invasive weeds are present, but not impossible. Whichever path you intend to travel, your persistence and dedication will increase the success of your long-term plan!

Education & Jutreach

Over the summer, the YEP Team said farewell to two of its three members as they moved away from the coast. We wish them the best of luck in their new endeavors! With one remaining YEP Team member, things have been quiet in the YEP office as of late. Yet, there are still exciting things in the works!

Curry Watersheds is excited to trial its High School Speaker Series this year, bringing in professionals from various fields related to watershed management, with the goal of inspiring the next generation of environmental stewards. The Speaker Series aims to provide students with concrete steps on how to pursue careers in this field, including job shadows and internship opportunities.

YEP is also planning a school garden teacher training session at the elementary schools this spring. They will be bringing in Kaci Rae Christopher, an expert in school garden education, to improve teacher utilization of these amazing outdoor classrooms!





Meanwhile, YEP has been continuing to work with the Horticulture Program at Pacific High School and the sixth graders at Riley Creek Elementary, expanding watershed education in Curry County.

And we can't forget about the strawberry madness students had at Valley Flora Farm this fall! Several elementary school field trips were held at the farm where students learned about regenerative agriculture and got to see it in action, horses in harness and all! Students sampled seasonal produce, which of course included those delicious red berries.

The YEP Team is excited to expand its reach after the holidays, working with more students and seeing its projects come to fruition!



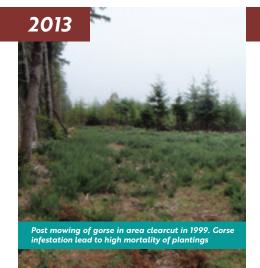
Protecting Drinking Water—a long game

In 1990's and early 2000's clearcutting and subsequent sedimentation issues related to road crossing failures and landslides on private land within the City of Port Orford's Drinking Water Source Area (DWSA) on the North Fork of Hubbard Creek kick started a movement to protect the forest that provides clean drinking water to its citizens. Three affected parcels account for 35% of the DWSA acreage. The City began purchasing the parcels and acquired two (80 acres) immediately adjacent to the reservoir in 2000. The largest at 140 acres in the headwaters was purchased by Curry County and immediately deeded to the City between 2003 and 2006. A conservation easement was placed on it to protect it from future resource extraction. During this time the Port Orford Watershed Council (POWC), South Coast Watershed Council (SCWC), and the Curry Soil and Water Conservation District (SWCD) partnered on their shared concerns to address the excessive sedimentation that was affecting the source water and reservoir. Road inventories were conducted, high priority culverts were pulled and/or up graded, vegetation was planted, and large woody instream habitat was constructed. In 2013 the SWCD and Coos Forest Protective Association (CFPA) worked with the City to begin addressing gorse and its associated fire hazard within the DWSA on the acquired parcels. Gorse was mowed and trees planted while a fire break was created around the perimeter of the 140 acre parcel to protect the City's residents from fire that might originate in the gorse infested lands to the east including the DWSA.

Fast forward to 2021 and the SWCD secured \$314,373 in funding provided by the State's Legislative Emergency Board through the Oregon Department of Forestry. The funding was intended to reduce wildfire risk. Knowing that gorse control is a long game and that the previously created fire break was reaching 10 years without maintenance the SWCD worked with the City and the POWC to continue these efforts started so long ago. This district provided

vegetation management on the previously treated gorse patches and technical assistance to write additional grants. With the SCWD's help the POWC orchestrated a deal to purchase an additional 160 acres within the DWSA that was slated to be logged. This year in cooperation with the City of Port Orford the SWCD will be conducting an updated road inventory on the remaining road and stream crossings. Early in this process a legacy culvert was identified to be at risk of imminent failure. The culvert is rusted out and collapsing. If it collapses fully the large road fill above will effectively dam the stream channel which could lead to a catastrophic failure and inundation of fine sediment in the reservoir. This tributary is currently providing clean, low turbidity source water to the reservoir. Due to earlier errors the City has struggled to maintain the dredging permits needed to keep the reservoir functioning. High sedimentation is an ongoing issue within the DWSA do to the underlying geology of unstable soils. The SWCD is working with the City's engineer on a design and permits to hopefully remove this culvert in 2025. Gorse control treatments have been on going since 2021 with grants managed by the SWCD. The City has successfully secured a new dredging permit as well.

This effort to protect the Hubbard Creek DWSA for the benefit of the citizens of Port Orford and the wildlife that relies on its protection is a great example of local resilience and perseverance. There have been many hands over 30 years building on previous actions to get to this point, but the work is not over. Along the way the SWCD and its partners have been a steady force for the City of Port Orford and the POWC to partner with to address the long-term stewardship of this important resource, clean drinking water.

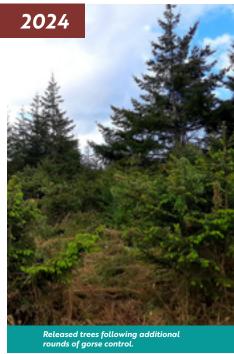














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Cover Caption: Sullivan Gulch project



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