

WINTER/SPRING
2020

CURRY *Currents*



29692 Ellensburg Avenue
PO Box 666
Gold Beach, OR 97444
(541) 247-2755
info@currywatersheds.org

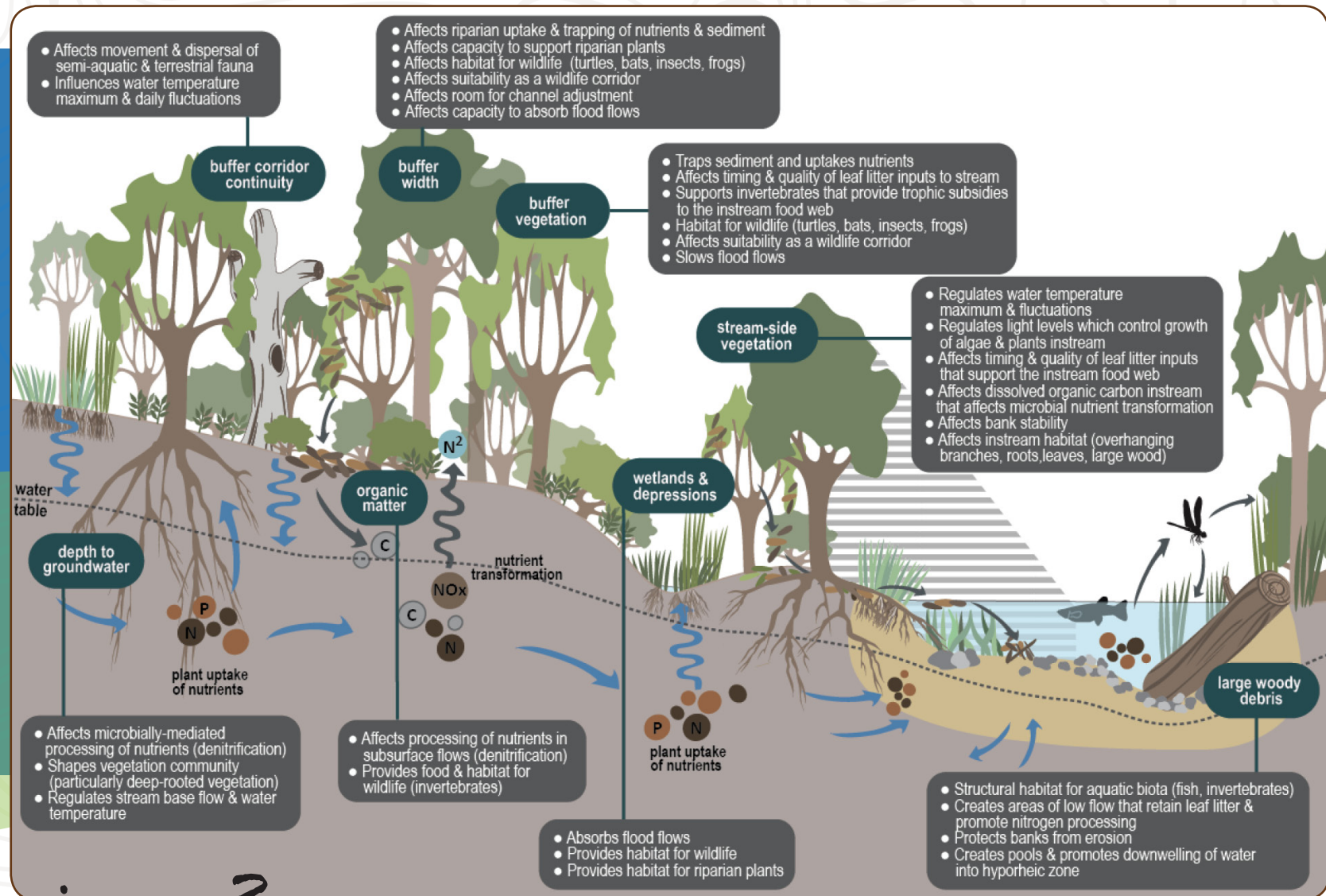
IN THIS ISSUE

Riparian Zones - The Interface of the Land and Rivers	2-5
Managing and Restoring Riparian Zones	6-7
Get Involved	8-9
Weed Alert!	10
Reports from the Field	11-14
Acknowledgements	15



A healthy riparian ecosystem has many forms and functions, and helps life to thrive!

Photo Credit: San Antonio River Authority



Riparian Zones

THE INTERFACE OF THE LAND AND RIVERS

“Riparian” is the term used for the biophysical communities along the edges of rivers and streams. Riparian zones are not easily delineated, but they encompass the stream channel between the low and high water marks, and the terrestrial landscape from the high water mark toward the uplands where vegetation is influenced by elevated water tables or flooding, and by the ability of the soils to hold water. Healthy riparian forests are distinguished by a change in vegetation type, being composed of specialized grasses, forbs, shrubs, and/or trees that have learned to adapt to site-specific seasonal variations in water levels, and the harsh living conditions (e.g. floods, erosion, drought) that can accompany these variations. Various referred to as ‘filter strips’, ‘buffers’, and ‘refuges’, these names clue us in to the role that riparian zones play within the larger landscape - they serve as a sort of mediator and guard between our rivers and adjacent lands.

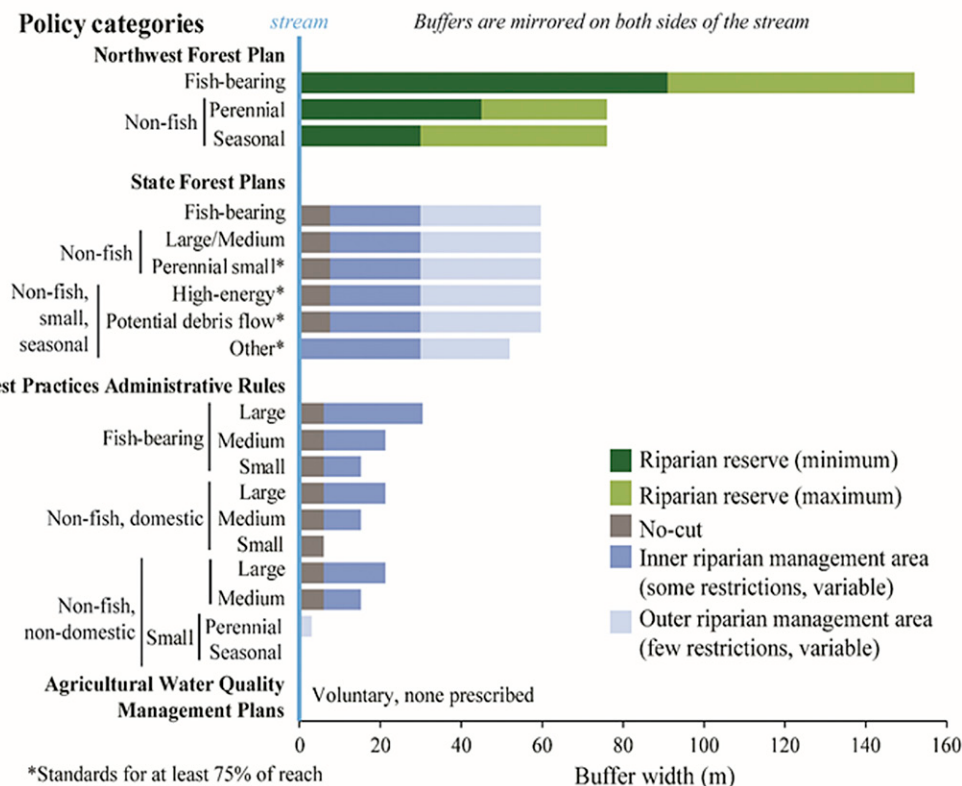


For one, mature riparian forests at the river's edge help hold soils together through a tightly woven root system. This protects the bank from eroding, and as a result, forested stream banks are generally much more stable than the banks along deforested streams. Those same plant structures that resist erosion are also effective at intercepting sediments and sediment-bound nutrients, pesticides, and heavy metals that flow overland to the riparian zone. Many of these pollutants are then captured or broken down in riparian soils before they ever even enter the waterway; others are converted to useful forms through plant uptake. For example, plants may convert excess nutrients like nitrogen and phosphorous into biomass during the growing season.

Another benefit of riparian forests is their effect on moderating stream temperatures. Unforested stream reaches, particularly on small streams, experience higher summer maximum water temperatures than those under the shading of a forest canopy. This reduces the available habitat for fish and makes it more difficult for aquatic insects to survive and thrive. Many streams in Curry County are warmer than state standards for rearing of juvenile salmonids, emphasizing the importance of this riparian function in our watersheds.

Besides the benefits that live trees provide in a riparian zone, the larger stems, branches, and root wads of dead trees ('Large Woody Debris') also has its benefits. Streamside forests are the primary source of this material, which plays a multifaceted role in the stream environment: Large woody debris helps retain and process leaf litter, thus providing nutrients and food for aquatic organisms; It increases the diversity of instream habitats by forming dams and pools, and provides cover and protection for fish; And, it dissipates the energy of water (slowing flood flows) and keeps sediments from moving downstream.

Riparian Management Buffers in the Oregon Coast Range



Designated widths for riparian buffers in our region. Northwest Forest Plan and State Forest Plans apply on public lands. Forest Practices Administrative Rules and Agricultural Water Quality Management Plans apply on private forest and agricultural lands, respectively. There are also County Zoning Ordinances that designate widths for riparian buffers in Curry County (see page 8).

More information on this graphic and these policies can be found here:
https://www.fs.fed.us/pnw/pubs/journals/pnw_2017_boisjolie001.pdf

Managing AND RESTORING RIPARIAN ZONES

Given all the benefits provided by riparian forests, it's no wonder their importance to healthy and diverse fish communities, and why we work so hard to protect and restore riparian areas in Curry County. Some of this work is highlighted later in this newsletter. Both landscape and detailed site perspectives help to plan riparian restoration, and judge whether it will achieve desired benefits to the watershed. Detailed site perspectives come from understanding water regimes and soil conditions, and their effects on long-term survival and growth rates of different species. It is also worth considering the width of the riparian forest (i.e., 'buffer') that will be most effective at achieving desired functions at the site level. For example, riparian buffers that are at least 30m wide are most effective at filtering pollutants and protecting the stream reach from measurable temperature increases, but the likelihood of these benefits continues to increase in buffers wider than 30m. Considering riparian restoration with a landscape perspective is also important for weighing priorities at a watershed scale, as well as impacts that may originate far from the site itself.

For landowners who are interested in enhancing their riparian areas, it pays to do some careful planning and preparation, and we're here to help. For example, below is some guidance from our Vegetation Management Foreman, Dustin Williams, about invasive weed management in riparian areas. Following that, we also provide some background on the county ordinances that guide what we all can and cannot legally do within riparian zones.

INVASIVE WEED MANAGEMENT IN RIPARIAN AREAS

Riparian degradation comes in many forms that can negatively affect watershed function. Dense monocultures of invasive weeds and non-native vegetation are often a result of negative impacts in riparian areas. Whether heavy use from land practices or natural events, degraded and scoured soils invite invasive weeds to the party first! Along with many other important steps, "Site preparation" is essential to begin enhancing riparian areas and restoring watershed function. This step often includes invasive weed management to some extent.

Before any desired native vegetation can be planted and effectively maintained, any or all invasive weeds must be removed. Thick stands of blackberry and a heavy matting of



> Reed canary grass was treated here before the planting of native trees and shrubs.

canary grass are all too common at many restoration sites. Other species include gorse and Japanese knotweed which are equally tenacious species to manage in any type of terrain. Initial steps in site prep include mowing or mulching to reduce biomass and enable access for effective management. Timing is a critical step in this whole process if you plan on using herbicides to effectively manage these invasive weeds. Knowing when and what to use will ensure the success of your efforts. Fall treatments are often the most effective for herbicide treatments so a late summer knockdown usually offers enough regrowth for adequate chemical intake. Aquatically labeled products are also highly recommended as well as following all procedures by the label.

When to re-plant is one of the most crucial decisions while managing an invasive in your project area. Ideally you can plant the following winter after a solid year of site prep has occurred. Depending on what type of invasive you're battling, even two years of site prep would help benefit native plant establishment. Site prep is often rushed and can cause increased labor if invasive weeds are present. Another option is to "ring spray" around new plantings to give them a head start over competing vegetation. Again, timing of your application is also important whether applying a ring spray before or after plant establishment. In the end the desired outcome is to create a diverse community of native trees and shrubs. Managing invasive weeds is just a small, but vital part of the process.

Get Involved

CURRY COUNTY RIPARIAN ORDINANCES

Did you know there are County Riparian Ordinances? These rules guide what you can and cannot do within your riparian area. We would encourage you to take a look at Section 3.281 specifically, which lines out the riparian corridors one needs to maintain a healthy stream. For larger systems, like the Rogue and Chetco Rivers, a buffer of 75 feet is necessary; however, when talking about other coastal streams and tributaries, the buffer is 50 feet. Please take some time to further review this County ordinance.

***Disclaimer – these are County rules, not Curry Watershed Partnership rules. Rules can be found on Curry County Zoning Ordinances: pgs. 162-166; and can be found at http://www.co.curry.or.us/departments/community_development_department/planning_division.php*

OTHER USEFUL RESOURCES

Life on the Edge: Improving Riparian Function (Video):
<https://www.youtube.com/watch?v=3qvjuHFjb2w>

Streams and Riparian Areas: Clean Water, Diverse Habitat:
<https://catalog.extension.oregonstate.edu/em9244>

Managing Himalayan Blackberry in Western Oregon Riparian Areas:
<https://catalog.extension.oregonstate.edu/em8894>

LOCAL BOARD MEETINGS



Curry Soil and Water Conservation District - Last Tuesday of the month at 7:00 pm at the Curry Watersheds Partnership Office.
Contact Liesl Coleman for more information: 541-373-3245
liesl.coleman@currywatersheds.org



Lower Rogue Watershed Council - 3rd Tuesday of the month at 3:30 pm at the Curry Watersheds Partnership Office.
Contact Kelly Timchak for more information: 541-373-0057
kelly@currywatersheds.org



South Coast Watershed Council - 4th Thursday of the month at 3:00 pm, rotating location between Port Orford, Gold Beach, and Brookings. Contact Miranda Gray for more information: 541-373-3127
miranda.gray@currywatersheds.org



UPCOMING EVENTS

‘Beaver Biology, Behavior and Management: What they do and why they do it’ - Friday February 21st, 6:00 p.m.

Curry Public Library in Gold Beach

Jakob Shockey, Restoration Program Manager for Applegate Watershed Councils, will cover tools for addressing beaver conflicts, why it's worth it, and emergent trends in beaver management.

‘Sea Otters in Oregon’ - Tuesday March 10th, 6:30 p.m.

Curry Public Library in Gold Beach

Once common on the Oregon coast, sea otters were hunted nearly to extinction for their rich fur in the late 1700s and early 1800s. Although they have returned elsewhere, they remain missing on the Oregon coast. What will it take to help them return to Oregon?

‘Biochar: Know It, Make It, Use It’ - Friday March 27, 2020 9:00 a.m. to 3:00 p.m.

Exact location TBD, Gold Beach

Learn how charred biomass (biochar) can increase soil productivity, reduce wildfire risk, and slow climate change. Biochar consultant Kelpie Wilson will provide a science of biochar followed by a demonstration of how to make it from your burn piles. Contact Miranda Gray for more information: 541-373-3127

‘Earth Day Celebration’ - Saturday April 18th, 2020 1:00-5:00 p.m.

SWOCC Brookings Campus

This year marks the 50th anniversary of the first official Earth Day. Join Southern Oregon Climate Action Now (SOCAN) and other planet Earth enthusiasts to celebrate! Free and open to everyone. Contact Deb Worth with SOCAN for more information - 530-263-8996

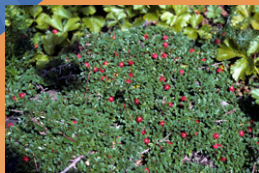
Weed Alert!

We would like to use this space to bring you a highlighted plant from the GardenSmart Oregon Guide (available at our office, and online: <https://www.portlandoregon.gov/bes/47570>). Most of us have dealt with ivy at some point – it's in our yards, our parks, our forests, on our buildings and fences. If you let it go, it will quickly overtake an area and wipe out native vegetation. It can also harbor pests like rats and mice. Consider “going native” after removing your ivy infestation. Here are a few native alternatives for your landscaping needs.



STOP! English Ivy & Irish Ivy (*Hedera helix*, *H. Hibernica*)—Vigorous woody perennial with two growth forms; juvenile form has 3-lobed leaves, adult form has diamond-shaped leaves. Ivy can form a thick canopy layer that carpets the forest floor, climbs and smothers trees, causes trees to rot, and makes canopies heavier and more susceptible to windthrow, increasing fire hazards.

GO!



GO! Native replacements – (shown from left to right top, then bottom row): Prostrate Ceanothus, Sword Fern, Kinnikinnick, Creeping barberry. Each of these are widely available at nurseries, and serve a fuller purpose than ivy. They serve as ground cover, erosion control, and provide berries for wildlife.

Reports FROM THE FIELD

RESTORATION

Riparian and Vegetation Management

In January 2020, we will begin the season of riparian management that, for the most part, follows on the heels of instream habitat enhancement projects that we implemented this summer. After initial preparation and planting at the following sites, we will begin riparian maintenance to give the trees and shrubs a head start over any competing vegetation.

In the Floras Creek watershed, we have been working with the Langlois Water District to improve habitat and water quality within their “Source Water Protection Area”, and this winter we will be managing English ivy and planting ~3 miles of riparian habitat in that area. This summer we implemented the first round of instream enhancement projects under the Elk River Strategic Action Plan, which includes multiple projects to restore habitat for native coho salmon. We will be following up this winter with planting along two tributaries of the Elk River - Cedar and Kermit Creek - as well as a short length of the Elk River mainstem. In the neighboring Sixes River watershed on Cape Blanco State Park, we will be augmenting riparian and wetland plantings that originally occurred in 2016 as part of the Sullivan Gulch Bottomlands Restoration Project. And lastly, in the Chetco River watershed we will be planting within the riparian zone of Jack Creek (at Salmon Run Golf Course), where a length of the stream channel was restored this summer to increase connectivity to adjacent wetland habitat.



English Ivy before @Floras Creek Watershed



English Ivy after @Floras Creek Watershed



Cedar Creek



Jack Creek @ Salmon Run Golf Course

Reports FROM THE FIELD

RESTORATION (CONTINUED...)

Natural Resources Conservation Service (NRCS) Assistance

Also in early 2020, we will be assisting landowners enroll in NRCS's Conservation Reserve Enhancement Program (CREP), under new 2018 Farm Bill rules. Our CREP Technician provides support to this important program, which offers cost-shares and incentive payments to agricultural landowners who restore their riparian buffers, and commit to protecting the new plantings over a 10-15 year contract period. This year, we'll be working on seven projects in Curry County - two new restorations and five proposed re-enrollments - to protect 140 acres of riparian habitat.



Riparian enhancement is supported by the NRCS Conservation Reserve Enhancement Program



Cranberry irrigation (above) and livestock fencing (below) are supported by NRCS Environmental Quality Incentives Program

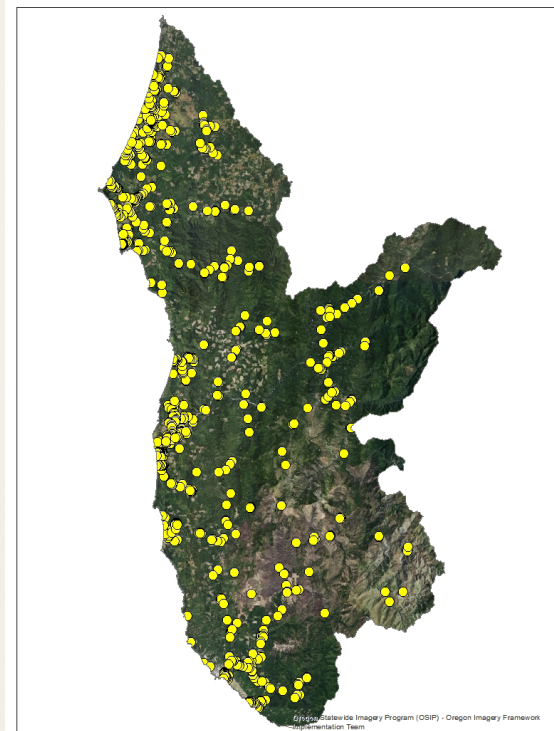
We will also be continuing to help the NRCS meet other program needs as they work to restore local staffing. We're currently providing assistance to design and certify NRCS practices under the Environmental Quality Incentives Program (EQIP), plan for local program needs, and provide general office support and outreach. Through this support, we've helped our landowners receive prompt payments as they've installed miles of fencing and pipeline, improved pasture and cranberry irrigation efficiency, planted cover crops and windbreaks, treated Sudden Oak Death outbreaks, and improved forest health with planting, fuel breaks, brush control, and non-commercial thinning.

Watersheds Monitoring

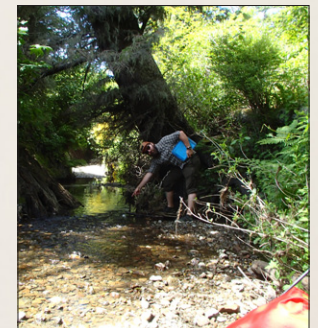
Winter also marks the beginning of the season for data analysis. In 2019 we carried out a number of monitoring activities in multiple watersheds such as: collecting continuous water temperature data all summer long, measuring streamflows, monitoring small streams for juvenile salmon, conducting water quality sampling, and coordinating habitat surveys. All

of these activities produced a large amount of data, and as 2019 comes to an end we will be cozying up to the computer for some good ol' fashioned number crunching. This oh so important (and tedious!) part of the process is where the data turns into valuable information, providing context and telling the story of what's going on in our watersheds.

We continue to collect and analyze water quality samples throughout Curry County.



For example, over the years we have developed a method for monitoring our planting sites. We are now sitting down together to take a good hard look at the data this monitoring has produced in order to get the clearest picture of how these sites are doing. Taking the time to do all of this analysis will help us learn all that we can from our efforts so that we can do the best possible job planting, maintaining, and enhancing riparian zones in the future.



Reports FROM THE FIELD

YOUTH EDUCATION



Rayna smiles for the camera as her partner spreads wood chips around a small shrub.



Tygh holds up a “keeper” rainbow trout caught in the youth-only fishing pond.

For the past decade, students have been giving life back to the blackberry-choked banks of a small stream named Myrtle Creek, during an all-day field trip to Arizona Beach State Park that students and teachers anticipate each April. Curry County 3rd grade students also practice fishing skills at the youth-only fishing pond, with angler education volunteers. The field trip, appropriately named “Reel Fish Day”, began in 2009 and lives on through a dedicated partnership between Oregon Parks and Recreation Department (OPRD), Oregon Department of Fish & Wildlife (ODFW) and Curry Watersheds Partnership. OPRD manages the natural area and leads student hikes each year; ODFW’s STEP program and many dedicated volunteers provide the fish, angler education, and tackle; and our Education Program coordinates the field trips with schools and works with the students to manage the planted riparian areas for species diversity.

Reel Fish Days are unique because youth have the opportunity to keep a limit of up to five fish and take them home for their family. In addition, students use tools to provide “tender loving care” to the trees and shrubs that have been planted along Myrtle Creek’s riparian habitat. Since 2009, students have planted approximately 2,500 native trees and shrubs to benefit ecosystem health. Students participate in the circle of life, as these activities provide the perspective of ‘taking life’ and ‘giving life back’.



Curry Watersheds Partnership Staff & Contractors

Cathy Boden, Foodshed Education Coordinator
Liesl Coleman, Curry Soil and Water Conservation District Manager
Barbara Grant, NRCS Conservation Reserve Enhancement Program (CREP) Technician
Miranda Gray, South Coast Watershed Council Coordinator
Matthew Hubbard, Field Technician
Drew Harper, Riparian Management Coordinator
Erin Minster, Technical Coordinator
Robbie Lascheck, Monitoring Coordinator
Statia Ryder, Youth Education Coordinator
Mary Spini, Administrative Assistant
Matt Swanson, Contracted Restoration Project Manager
Kelly Timchak, Lower Rogue Watershed Council Coordinator
Dustin Williams, Vegetation Management Program Project Implementation Manager

Acknowledgements

Funding for the work mentioned above has come from the Bureau of Land Management, National Ocean and Atmospheric Administration, Oregon Watershed Enhancement Board, National Association of Conservation Districts, Gray Family Foundation, U.S. Fish and Wildlife Service, Combs Family Memorial Fund, Wild Salmon Center, Wild Rivers Coast Alliance, US Forest Service, and Oregon Parks and Recreation Department.