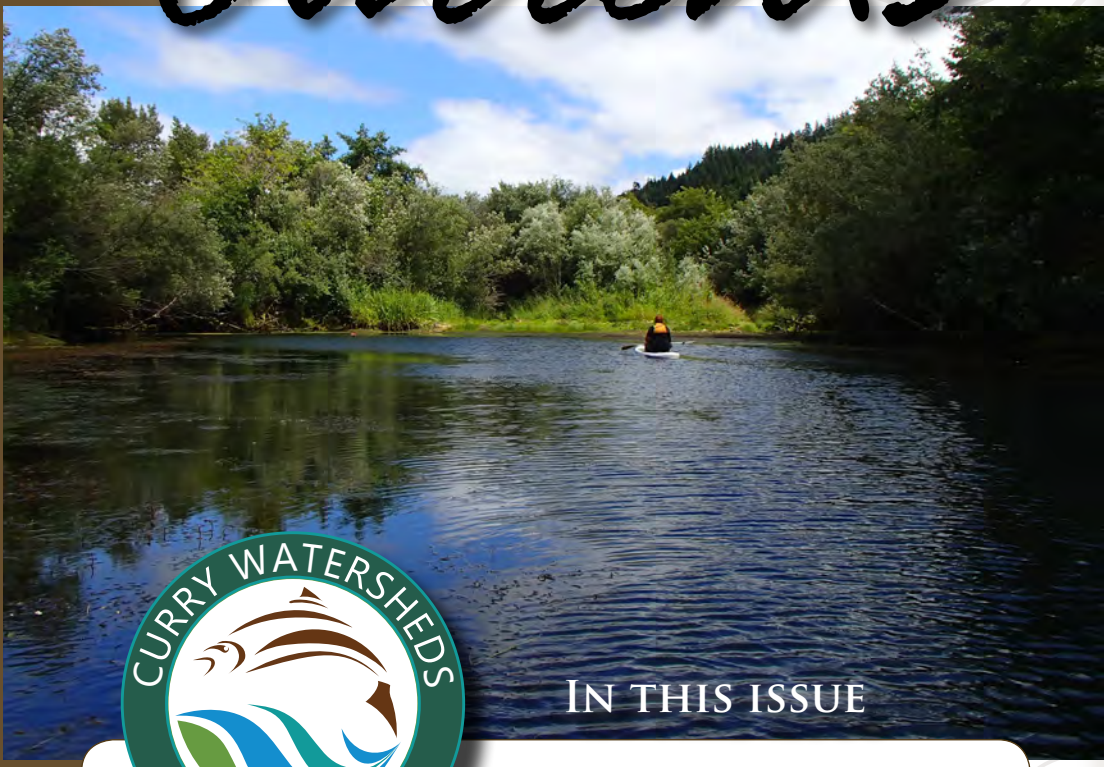
SUMMER/FALL
2019

CURRY Currents



In this issue

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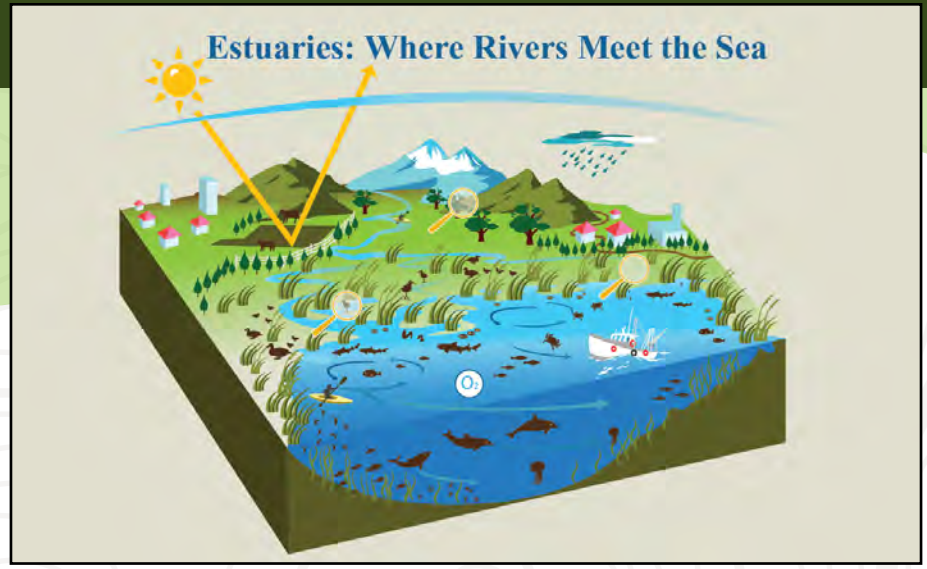
Estuaries – The Interface Of The Land And Sea

Estuaries are dynamic, rich ecosystems where freshwater from the land, carried by streams and rivers, meets and mixes with saltwater from the ocean. Tides exert a major influence on estuaries as salt water flows upstream and drains out twice each day. Waves, winds and storms all shape (and re-shape) our estuaries each year, with some places protected from the full force of the ocean by reefs, islands, fingers of land, or areas of mud or sand. Our estuaries provide habitat and feeding grounds for many fish, birds, shellfish, mammals and other wildlife. Not only do migratory birds use estuaries to rest and find food during their journeys, but a large variety of native birds call these places home as well.

Threatened species live in many of our coastal watersheds, with several species of fish relying heavily on healthy estuaries to provide important habitat for spawning, and areas where juveniles can grow and adjust to changing conditions as they head inland or out to the ocean. In addition to all the ecosystem benefits, these habitats also serve to protect our coastlines and infrastructure from storm surge, which is becoming more of an issue due to climate change and sea level rise.



Check out an interactive illustration about Estuaries and Climate Change at
https://coast.noaa.gov/estuaries/curriculum/climate-extension.html

image used with permission noaa.gov

Spotlight on our Estuaries

Rogue River Estuary

The Lower Rogue basin is 226,668 acres and empties into the Pacific Ocean at Gold Beach, Oregon. On the south shore at river mile 1.5, God Wants You Slough (within Elephant Bar) is the most densely vegetated tidal slough in the estuary; connected at the downstream end to the Rogue River Estuary. This area is used extensively by wildlife and waterfowl, and the slough also provides over-wintering habitat for coho salmon, and critical summer rearing habitat for steelhead, cutthroat, Pacific lamprey, and Chinook salmon. Due to the high potential of the area for fish production and the need to improve stream complexity, the slough has been identified as a high priority for restoration and conservation in the Rogue River.

Lack of quality habitat and floodplain connectivity is highlighted as a key stressor for all coho populations in the Rogue River. This limiting factor also impacts suitable habitat for steelhead, Chinook, amphibians, reptiles, and beaver in the Basin. The Lower Rogue Watershed Council will address these limiting factors of habitat quality and connectivity by adding large wood to floodplains and the slough to provide structural complexity, and to revegetate riparian areas with native species in order to provide a long-term source of wood, floodplain roughness, and diversity as well as overhanging cover to slow the rate of water warming and to support insect production for fish.

The project is currently in the design phase, which we will be working on over the summer with the River Design Group. The Council will apply for a restoration grant this fall, and hopefully put the project on the ground in summer 2020. In the meantime, feel free to walk the trail out on Elephant Bar and you can see where we will be working. Stay tuned!

New River Estuary

Historically, a low foredune dominated the beach where New River now meets the ocean. During high water events, local streams would cut individual paths through the low dunes and flow directly to the ocean. When European beach grass was introduced in the early 1900s to stabilize sand next to the ocean, the dunes built up and began blocking these individual paths to the ocean. Over time, the streams ran together behind the foredune to form "New River". Today, Floras Creek is the major tributary to New River, and we refer to our northernmost watershed as the New River/Floras Creek watershed.

During periods of high runoff, waters that historically flowed freely to the ocean began flooding local ranches, threatening infrastructure, and killing livestock. In 2002, the Bureau of Land Management (BLM), the Curry Soil and Water Conservation District (SWCD), the South Coast Watershed Council (SCWC), and local landowners began to co-manage the New River/Floras Creek system to improve ecological conditions and meet

landowners needs. They began by initiating new grazing and mechanical river breaching practices, and implementing stream restoration on Floras Creek, to protect valuable pastureland while also improving habitat for fish and other wildlife.

Today, the scale, complexity, and cost of restoring this system has warranted a deeper understanding of the Floras Creek morphology, so that future investments are commensurate to the underlying complexities, and are made in areas and on project types that are likely to succeed. The BLM now initiates temporary breaches at New River when certain timing and high water parameters are met, and moves these breach locations periodically in order to maximize benefits throughout the estuary. Through continued partnership with the BLM and landowners, the SCWC and SWCD will continue to invest in the New River/Floras Creek estuary to improve instream and riparian habitat, and protect working agricultural lands.

New River and adjacent lands administered by BLM are in a special management category known as the New River Area of Critical Environmental Concern (ACEC). The ACEC offers miles of trails, waterways, and beaches for hikers, bicyclists, equestrians, wildlife viewers, and boaters. With its diversity of habitats and interconnected network of rivers, streams, and lakes, New River is a secluded place rich in biodiversity.

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: 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: 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: miranda.gray@currywatersheds.org

Curry Watersheds Partnership Staff & Contractors

- Cathy Boden, Foodshed Program Coordinator
- Liesl Coleman, Curry Soil and Water Conservation District Manager
- Barbara Grant, Conservation Reserve Enhancement Program (CREP) Technician
- Miranda Gray, South Coast Watershed Council Coordinator
- Matthew Hubbard, Field Technician
- Drew Harper, Riparian Management Coordinator
- Maya Holiman, Education Program Assistant
- Erin Minster, Technical Coordinator
- Robbie Lascheck, Monitoring Coordinator
- Statia Ryder, Watershed Education Program 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

Get Involved

Upcoming Events

Saturday, July 13 12:00 pm - 4:00 pm Party in the Park

The theme this year is “Toy Story”. Curry Watersheds Partnership, Little Bo Peep, and her sheep will be there to demonstrate the importance of riparian buffers on our local agricultural lands.

Saturday, July 20 10:00 am - 2:00 pm Redfish Rocks on the Dock

Redfish Rocks Community Team is holding the annual Redfish Rocks on the Dock Party. They will be highlighting their ocean partners, and there will be awesome hands on activities for all ages, as well as free food and drink.

Saturday, August 10th, 9:00 am - 2:00 pm Cherish the Chetco

Join us for a free float down the Chetco River. We’ll give back by picking up trash while we’re at it, and end the float with a potluck of fresh local foods at Alfred Loeb State Park. No experience necessary. Call Miranda at 541-247-2755 ext. 8# to reserve a spot on a kayak today.

Saturday & Sunday, September 21 & 22, Agness-Illahe Gathering of the People

The 26th annual event will feature drums, demonstrations and vendors all day on Saturday with a Grand Entry at 1 pm and 7 pm, and canoe races at 11 am on Sunday as well as a Grand Entry to follow. Drug and alcohol free event. For more information contact Larry Fry at 541-294-6566 or Nina Fry at 541-404-3991.

Weed Alert!

We would like to use this space to bring you a highlighted plant from the Garden Smart Guide (available at our office). If you would like to attract bees, birds, and other beneficial insects to your yard this summer, consider "going native" first. Butterfly Bush is commonly planted along stream sides, but can quickly overtake the area and wipe out native vegetation. Here is an alternative for you to ponder...

STOP! Butterfly Bush (Buddleja davidii) – Flowers are 4-petaled, tubular at base, and white to pink to purple. They can grow up to 10' tall.

GO! Native replacement – Blue blossom (Ceanothus thyrsiflorus) - If you're fond of honeybees, bumbles, and hummingbirds, or if true blue is your favorite color, consider adding this native evergreen to your landscape.

Reports from the field

Restoration

Instream Habitat Enhancement

Cedar Creek channel reconstruction will improve habitat and address prolonged pasture flooding.

This summer in the Elk River watershed, we will be partially reconstructing the existing stream channels of Kermit and Cedar Creek, which provide spawning and rearing habitat for coho, steelhead, cutthroat, and lamprey. These channels were ditched in the 20th century to increase pasture, and reconstruction will enhance instream habitat and restore continuous floodway connectivity in the Elk River estuary. These projects are the result of a collaboration between local groups and agencies to restore the wild coho population in the Elk River - and they're just the beginning. The Strategic Action Plan for Coho Salmon Recovery in The Elk River was just published, and you can view it at our website: http://www.currywatersheds.org/scwc/elk-river-sap-for-coho-salmon-recovery.pdf

Just to the north in the Sixes River watershed, we will be replacing a culvert with a countersunk arch culvert to restore access to an additional 6,700 feet of North Fork Crystal Creek, which will increase resiliency of a resident population of cutthroat trout. We will also be replacing a ranch road culvert in the New River/Floras Creek watershed, to restore unobstructed access to 4,000 feet of habitat for resident cutthroat in Johnson Creek.

Down south in the Chetco watershed, we will be pulling an orphaned road crossing to restore unimpeded access into a 2-acre oxbow wetland on the Jack Creek floodplain. Jack Creek provides spawning and rearing habitat for Chinook, coho, steelhead, cutthroat, and lamprey. We will also install log structures in the creek to preserve the wetland hydrology and enhance habitat, and manage for native species on half an acre of riparian edge habitat.

Pulling this orphaned road crossing on Jack Creek will restore access to a 2-acre wetland.

Riparian and Vegetation Management

Cape Ivy site after an initial treatment.

Spring has sprung and gorse blossoms spatter the landscape with that familiar yet startling yellow accent. The rains seem to ally gorse and other weeds in force, thus prolonging the inevitable brown-out from planned treatments. This summer, we will ramp up again for the 2019 season. First on the docket will be a swift kick to Cape Ivy and English ivy. Only 15 known sites of Cape Ivy exist in the entire state of Oregon, all of which reside here in Curry County. We will also continue to control eight acres of English Ivy along Floras Creek, which is the municipal water source for the town of Langlois.

We will quickly jump ship to sail the sea of gorse ranging from Brookings all the way to our northern border. Our success with gorse management has been largely credited to our tactic of "ousting the outliers". We stand firm on holding the line due to the extreme capability of gorse taking over the landscape. Although several areas have dense stands of gorse, our diligent efforts are keeping most of our productive land gorse free.

On the flip side, we will be maintaining approximately 20,000 native trees and shrubs that we have planted over the last four winters, at sites along streams that run through working ranches and farms and Cape Blanco State Park in northern Curry County. In addition to establishing these plantings, we will be preparing sites for further plantings to occur in early 2020. We will also be constructing livestock watering systems to provide an offstream drinking source for livestock on three different ranches. By pumping or using gravity to deliver water to troughs through pipes, these systems will provide an alternative to livestock drinking directly from streams and ponds and disturbing riparian vegetation.

Sullivan Gulch in Cape Blanco State Park, where we've planted thousands of native trees and shrubs across 24 acres.

From a water quality perspective, functional offstream water systems and riparian plantings reduce the potential for sediment and nutrient delivery to surface waters that can be associated with livestock accessing those areas. From a livestock management perspective, riparian plantings can prevent streambank erosion of valuable agricultural lands, and watering systems can support various grazing management strategies while providing clean drinking water for the herd.

Watersheds Monitoring

A hoop trap set in Kermit Creek to monitor juvenile coho use.

We will be looking at a number of aspects of the Elk River watershed this summer that all relate to the health of coho salmon, and align with the Strategic Action Plan for Coho Salmon Recovery in The Elk River. These activities include: identifying tributaries that are being used by juvenile coho, monitoring summer water temperatures, and surveying streams to identify high quality coho habitat. Since it's important for us to monitor the effectiveness of our actions in the field, we will also be developing project-specific monitoring actions for upcoming projects. This will allow us to track what's working, and address any future issues that may come up as soon as possible.

We have been collecting information on watershed function, and monitoring the effectiveness of our restoration projects to improve watershed health, over the past 20 years. As we continue to do so this summer, we will also be reviewing the past 20 years of these data, and laying out a Strategic Monitoring Plan for watershed monitoring and assessment over the next 20 years. This review and plan will help us tell the story of restoration and other watershed changes over the long term.

Education

Foodsheds

Students getting a close look at the rich soil of Valley Flora Farm.

This past school year, 4th and 5th grade classes from Bandon and Gold Beach spent three weeks learning about Oregon agriculture, and how growing food affects our watersheds. This 12-class unit helped youth understand why they should care about the food they eat. They also learned how supporting local agriculture helps the economy of their community. Following the classes, students participated in a foodshed celebration where they sampled local foods. These students also got to see first-hand how food is grown and raised in our region, with field trips to our area farms & ranches. "My family went back to Valley Flora Farm the next day and purchased fresh veggies I tried on the field trip. We had them for dinner. It was delicious!" shared a Foodshed Student at Riley Creek School.

This year we also offered an after-school Cooking Club in Port Orford to 5th-8th graders, with the help of Driftwood Elementary and the Crazy Norwegian restaraunt. Students made dishes for a Farm to School dinner, featuring Local Port Orford Sustainable Seafood lingcod and Wahl Wild Rivers Coast lamb tacos. Other middle school students helped to organize the event, through marketing, educational displays, and presentations, including a tour of their newly rebuilt school garden. "My grandson asked for a chef's coat for Christmas, then he asked if he could see my recipes!" shared a grandparent in Port Orford.

Watersheds

This was the first year that students didn't get to experience the joy of salmon returns in local streams, since we began leading salmon watching field trips in 2011. Each December, over 200 3rd and 4th grade students from Brookings to Langlois participate in salmon watching field trips, following their Salmon Ecology classroom unit. In years past, classes would

witness up to 25 or more migrating Chinook and Coho salmon on the same short reaches of streams.This left students to wonder, "Why didn't the salmon return?" Discussions with students afterwards produced ideas like: Water levels were low (due to a dry fall season), "Successful" fishermen and fisherwomen in the ocean, ocean predators, and pollution.

Students taking an estuary hike during Outdoor School.

All of Curry schools sixth grade students participated in Outdoor School this 2018-19 school year by using Oregon State University's Outdoor School funding from the recently passed ballot Measure 99. We provided leadership to all 3 Curry School Districts in their planning efforts that led to this new Outdoor School programming, as well as serving as the Outdoor School provider for the Driftwood School 6th grade class.

For more information about this important state-wide initiative please visit this website: https://extension.oregonstate.edu/outdoor-school

Since 2004, we have been delivering meaningful watershed and foodshed education experiences to Curry youth, with the help of strong local partnerships with schools and the natural resource community. As we look forward, we want to make sure we can sustain the experiences and relationships that we have worked so hard to build. Therefore, we are in the process of developing a long-term Education Strategic Plan, to build capacity with existing and new partners, and to continue the important work of connecting youth with the natural world in meaningful ways.

Acknowledgements

Funding for the work mentioned above has come from Oregon Watershed Enhancement Board, Oregon Department of Agriculture, Bureau of Land Management, Wild Rivers Coast Alliance, Gray Family Foundation, individual landowners, National Fish and Wildlife Foundation, Oregon Department of Fish and Wildlife, Oregon Department of Environmental Quality, Oregon State Weed Board, the Wild Salmon Center, the Pacific Marine and Estuarine Partnership, the US Forest Service, and the City of Brookings.