

1962-2022

DECEMBER 1, 2022

# COOS SWCD

COOS SOIL & WATER CONSERVATION DISTRICT

## 60TH ANNUAL REPORT

# 2022

**WATER QUALITY  
MONITORING  
THROUGHOUT  
COOS COUNTY**

**TIDE GATE  
REPLACEMENTS  
& A THRIVING  
COASTAL  
ECONOMY**

**PROJECTS IN  
PROGRESS**

**STRATEGIC  
IMPLEMENTATION  
AREAS 2021-2023**

**MEET OUR  
TEAM &  
BOARD  
MEMBERS**

# District Manager's Note

## COOS SOIL & WATER CONSERVATION DISTRICT

2022 is a milestone year for the Coos Soil and Water Conservation District (Coos SWCD). We are celebrating not only the 60th birthday of the Coos SWCD, but also the successful installation of one of the Coos SWCD's largest-scale restoration efforts to date, the North Bank Working Landscapes Project. This year will also mark the evolution of the Coos SWCD team from a three-person crew to four, as we hire a fourth employee for the first time in our organization's history. September 2022 was also my personal 9-year anniversary of working at the Coos SWCD. It seems like just a few months ago I was awarded my 5 years of service recognition at the Annual CONNECT Conference (long before Covid-19 was even in our vocabularies), and now I am rounding the corner on a decade of service.

As the manager of this small but steadily growing organization, I occasionally have moments where I question, are we doing enough? Are we fulfilling our mission? But whenever I am in doubt, I only need to think back to where I started in 2013 when I was the brand-new Watershed Technical Specialist. I had zero relevant experience and received only three days of training from my predecessor. After a couple weeks on the job, I felt completely overwhelmed, and totally unqualified. There were just so many aspects to my job that I felt unknowledgeable and uncertain about. And yet I was hired to be a Technical Specialist. I concluded that the board must have made a serious mistake when they hired me and thought that I would soon be let go. But I also determined that they would have to fire me, because I would never quit.

Instead, I buckled down and began to read everything I could get my hands on. Textbooks, tech notes, reports, guidebooks, basin assessments, I read every piece of literature I could get my hands on. I attended every workshop, class, or training opportunity that presented itself. I badgered people from other organizations to explain things to me, to teach me what I needed to know to do my job. The Oregon Department of Fish and Wildlife has practically (and probably unwittingly) given me the personal instruction equivalent of a 4-year degree in fisheries and wildlife science through on the job training and mentoring provided by Chris Claire and, in the early years, Jeff Jackson as they accompanied me on various site visits, or helped me develop project proposals. The Oregon Department of Agriculture follows closely in second place for support and overall assistance provided to the Coos SWCD. Beth Pietrzak, Eric Nusbaum, Manette Simpson, and Sandi Hiatt have all been instrumental in our organization's growth and development.

I have learned so much over the past 9 years and have made some great friends and relationships with colleagues, coworkers, and landowners. I have watched the Coos SWCD board grow and evolve into a functional collaborative unit of dedicated community members. I have watched my staff advance in their careers, learn new skills, tackle new responsibilities, and gain confidence in their professional judgement. I have learned that 'management' (equally of time, personnel, and projects) is a skill in and of itself that must be continually cultivated, and that dogged persistence is perhaps the single most valuable trait that any individual can possess in life.

I feel incredibly proud of the work that we have done, and extremely excited for what is to come in the next few years. We have some big projects on the horizon, and a ton more work to do in Coos County. I only see more growth and strengthening in our future. This Annual Report is a lovely snapshot of some of our achievements from the past year, but just know that it barely scratches the surface of what we have actually accomplished, and although I am nearly ten years in now, I feel like we are truly just getting started.

*Cafey Sowers*

District Manager

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# *Introduction*

## **History of Coos SWCD**

The Coos Soil and Water Conservation District was formed in 1962 to coordinate government assistance with conservation needs, provide assistance, information, and education for Coos County farmers, ranchers, and woodlot owners to implement sound resource management and conservation practice.

The Coos-Coquille Agriculture Water Quality Management Plan (AgWQMP) was developed in 1998 for the 1993 directives of Senate Bill 1010. The document consists of an education component and a set of rules addressing measures that safe guard water quality, the beneficial uses of water resources, and provide best management practices for water quality concerns. The plan also includes the basins of Tenmile Lakes, Fourmile Creek and Twomile Creek, as well as The Camas Valley and Lower Umpqua areas in Douglas County. Two public hearings were held in Coos County in the fall of 2001. After a period of public comment and review, the Coos-Coquille AgWQMP was adopted by the Board of Agriculture in March of 2002. The Coos SWCD provides support to the Local Advisory Committee (LAC), which meets every two years for a review of the WQMP and associated rules.

## **Function of Coos SWCD**

The function of the Coos Soil and Water Conservation District is to make technical, financial and educational resources available to local landowners and to assist in any way so they achieve their conservation goals. The Coos Soil and Water Conservation District building is located at 379 North Adams Street in Coquille, Oregon. Office hours are 8:30am to 4:30pm, Monday through Friday. Stop by or call us to talk with our staff about financial assistance, farming practices, water quality, herbicides or any agricultural needs that you may have. Our staff is available to all citizens, landowners and any professionals in the natural resource field. We are a non-regulatory agency, able to assist landowners with financial and/or technical assistance throughout Coos County. We also coordinate with other agencies to provide assistance and education to landowners so they are able to receive the most up to date options available to implement good conservation management, comply with environmental regulations and endangered species act requirements and be good land stewards. Call us at 541.396.6879 to set up an appointment.

# *Introduction*

*continued*

## **Coos SWCD Mission Statement**

Coos SWCD helps landowners and land managers plan and apply conservation practices that conserve water, maintain soil health and productivity, enhance wildlife habitat and improve watershed function. Coos SWCD serves as a central hub by helping landowners and land managers access available technical, financial and educational resources from local, state, federal and other sources in their efforts to implement good conservation management, comply with environmental regulations and endangered species act requirements and encourage good land stewardship.

## **Coos SWCD District Office**

Coos Soil & Water Conservation District office is open Monday through Friday 8:30am to 4:30pm or by appointment. Our office is located at 379 North Adams Street in Coquille, Oregon. Our telephone number is 541-396-6879 or you can email us at [info@coosswcd.org](mailto:info@coosswcd.org).



# *Our Team*



**Caley Sowers  
District Manager**



**Modena Thomas  
Office Manager**



**Andrew Chione  
Water Quality Project Manager**

# OUR NATURAL RESOURCE & COMMUNITY PARTNERS!

## FEDERAL

*USDA, Natural Resources Conservation Service (NRCS)*  
*USDA, Farm Service Agency (FSA)*  
*USDA, US Forest Service (USFS)*  
*USDOI, Bureau of Land Management (BLM)*  
*USDD, Army Corps of Engineers (USACE)*

## COOS COUNTY

*Board of Commissioners*  
*Planning Commission*  
*County Forester*  
*Drainage District Chair*  
*County Weed Advisory Board*  
*County Road Department*

## OREGON

*Department of Agriculture (ODA)*  
*Special Districts Association of Oregon (SDAO)*  
*Oregon State University Extension Service*  
*Department of Forestry (ODF)*  
*Department of Fish and Wildlife (ODFW)*  
*Department of Environmental Quality (DEQ)*  
*Department of State Lands (DSL)*  
*Oregon Association of Conservation Districts (OACD)*  
*Oregon Watershed Enhancement Board (OWEB)*

## ACCOUNTANT

*Coquille Valley Accounting (CVA)*  
*Seth Fandel*

## BASIN

*Coos Watershed Association*  
*Coquille Watershed Association*  
*Tenmile Lakes Basin Partnership*

## PORTS

*Port of Bandon*  
*Port of Coos Bay*  
*Port of Coquille*

## TRIBES

*Coquille Indian Tribe*  
*Confederated Tribes of the Coos, Lower Umpqua and Siuslaw*

**Coos Soil & Water Conservation District**

Caley Sowers ~ District Manager  
379 North Adams Street  
Coquille, OR 97423  
541.396.6879

**USDA ~ Natural Resource Conservation Service**

Katie Woodruff ~ District Conservationist  
382 North Central Blvd, Coquille, OR 97423  
541.824.8091

**Curry Soil & Water Conservation District**

94181 4th Street  
Gold Beach, OR 97444  
541.247.2755

**Oregon Department of Agriculture - Natural Resource Division**

635 Capital Street NE  
Salem, OR 97301-2532  
503.986.4700

**Oregon State University Extension Service**

Cassie Bouska ~ Extension Agriculture  
631 Alder Street  
Myrtle Point, or 97458  
541.572.5263

**Coos Watershed Association**

Haley Lutz ~ Executive Director  
186 N 8th Street  
Coos Bay, OR 97420  
541.888.5922

**Coquille Watershed Association**

Dan Silvius ~ Executive Director  
309 North Central Blvd.  
Coquille, OR 97423  
541.396.2541

**Tenmile Lakes Basin Partnership**

Mike Mader ~ Director  
PO Box L  
Lakeside, OR 97449  
541.759.2414

**Oregon Department of Forestry**

63612 5th Road  
Coos Bay, OR 97420  
541.267.4136

**Coos County Water Resources Department**

District 19 Water Master  
290 North Central Street  
Coquille, OR 97423  
541.396.1905

**USDA ~ Farm Service Agency**

Bret Harris ~ County Executive Director  
376 N Central Blvd  
Coquille, OR 97423  
541.396.2841 ext. 100

**Coos/Curry CREP Tech**

Barbara Grant  
541.396.4323 ext. 106

**Bureau of Land Management**

1300 Airport Lane  
North Bend, OR 97459  
541.756.0100

**Oregon Department of Environmental Quality**

Bryan Duggan ~ Basin Specialist  
381 North 2nd Street  
Coos Bay, OR 97420  
541.269.2721 ext. 234

**Oregon Department of Environmental Quality**

Don Yon ~ Coastal Zone Management  
811 SW 6th Avenue  
Portland, OR 97204  
503.229.5994

**Oregon Department of Fish & Wildlife**

63538 Boat Basin Road  
PO Box 5003  
Charleston, OR 97420  
541.888.5515

**Oregon Watershed Enhancement Board**

Mark Grenbemer  
221 West Stewart Avenue - Suite 201  
Salem, OR 97501-3647  
541.776.6010 ext. 231

**Coos County Planning Department**

Jill Rolfe ~ Planner  
225 North Adams Street  
Coquille, OR 97423  
541.396.3121 ext. 210

# Coos SWCD 2021 - 2022 Financial Report of Expenses: ODA Scope of Work and District Operations Funds

## ODA Scope of Work Budget vs. Actual

	July 2021 - June 2022	Budget
<b>Income</b>		
Grant Income	\$61,534.63	\$61,534.96
<b>Total Income</b>	<b>\$61,534.63</b>	<b>\$61,534.96</b>
<b>Expenses</b>		
District Manager Payroll	\$14,661.35	\$11,064.90
Project Manager Payroll	\$5,456.32	\$11,477.40
Office Manager Payroll	\$22,259.17	\$18,494.30
Employee Benefits	\$1,235.00	\$3,048.000
Advertising/Legal Notices	\$0.00	\$165.00
Contracted Services	\$3,892.50	\$4,000.00
Audit	\$1,375.00	\$2,000.00
Equipment	\$1,598.33	\$1,369.00
Postage	\$0.00	\$600.00
Production	\$562.90	\$1,200.00
Rent	\$0.00	\$3,000.00
Supplies & Materials	\$306.69	\$304.36
Training	\$0.00	\$1,500.00
Travel & Mileage	\$321.53	\$3,000.00
Website Maintenance	\$312.50	\$312.00
<b>Total Expenses</b>	<b>\$51,981.29</b>	<b>\$61,534.96</b>

## ODA District Operations Budget vs. Actual

	July 2021 - June 2022	Budget
<b>Income</b>		
Grant Income	\$26,371.89	\$26,372.00
<b>Total Income</b>	<b>\$26,371.89</b>	<b>\$26,372.00</b>
<b>Expenses</b>		
District Manager Payroll	\$1,575.63	\$2,194.50
Project Manager Payroll	\$350.87	\$895.40
Office Manager Payroll	\$4,375.86	\$3,833.50
Employee Benefits	\$0.00	\$516.00
Advertising/Legal Notices	\$0.00	\$253.50
Contracted Services	\$4,038.00	\$2,800.00
Audit	\$1,375.00	\$2,000.00
Equipment	\$1,598.33	\$1,750.00
Postage	\$143.96	\$800.00
Production	\$0.00	\$650.00
Rent	\$5,100.00	\$3,000.00
Supplies & Materials	\$916.44	\$1,514.10
Annual Meeting	\$69.48	\$750.00
Travel & Mileage	\$0.00	\$650.00
Website Maintenance	\$312.50	\$315.00
Insurance	\$0.00	\$1,650.00
Membership Dues	\$122.04	\$0.00
Power	\$893.28	\$800.00
Telephone/Internet	\$2,307.93	\$2000.00
Vehicle Maintenance/Fuel	\$5.69	\$0.00
<b>Total Expenses</b>	<b>\$23,185.01</b>	<b>\$26,372.00</b>

Funds to support Soil and Water Conservation District capacity have been appropriated by the Oregon Legislature to the Oregon Watershed Enhancement Board (OWEB). The funds appropriated for this purpose are from constitutionally dedicated State Lottery funds (Article XV, section 4b). Oregon Lottery Funds are dedicated under Ballot Measure 76 and awarded by OWEB to fund Oregon's Soil and Water Conservation Districts. The Oregon Department of Agriculture has established an agreement with the Oregon Watershed Enhancement Board for the distribution of capacity grant funds to Soil and Water Conservation Districts.

The above tables demonstrates our Fiscal Year 2021-2022 Scope of Work and District Operations Capacity Grant Funds estimated budget and actual expenses for each quarter. Scope of Work funds are used to fund technical assistance to landowners, promote water quality workshops, conduct water quality monitoring, and develop grant proposals to fund projects. District Operations grant funds are used strictly for Coos SWCD operating costs such as office rent, utilities, bookkeeping, insurance, and satisfying certain legal requirements each year, such as production of our annual meeting and report.



# GRANTS AVAILABLE FOR PROJECTS TO IMPROVE WATER QUALITY AND WATERSHED HEALTH

The world changed in March 2020 and all of us at Coos SWCD have adapted during these unprecedented times. When things around our beautiful state began to shut down, our world became uncertain and we watched with the rest of the world wondering what would happen next, making the necessary adjustments to how we conducted day to day business. Through it all, we have stayed consistent in our mission to assist landowners in managing their natural resources both sustainably and responsibly.

Part of that mission includes working with private landowners to implement conservation projects that result in a net benefit to water quality or watershed health. Our team continues to work with multiple landowners in developing and implementing such projects throughout Coos County.

The Oregon Watershed Enhancement Board (OWEB) Small Grant Program provides up to \$15,000 in Oregon Lottery funds towards individual projects that help restore watershed elements such as creeks, rivers or wetlands.

Landowners looking for financial help with projects on agricultural lands that have a direct benefit to watershed health should contact the SWCD to discuss eligibility and application requirements. Examples of eligible project types include fencing to exclude livestock from streams, installing watering trough systems for livestock to have alternative drinking sources, stream crossing improvements including installation or replacement of bridges and culverts, removal of noxious or invasive weeds and planting native trees to promote riparian health, species diversity and

pollinator habitats. SWCDs, Watershed Councils, and Tribes may apply on behalf of private landowners to the local Small Grant Program for grants of up to \$15,000. The application review process usually takes less than 60 days and successful applicants have up to two years to complete the funded project.

Please contact the Coos SWCD at 541-396-6879 or email [info@coosswcd.org](mailto:info@coosswcd.org) to find out if your project qualifies.

# The Oregon Conservation Reserve Enhancement Program (FY 2021)



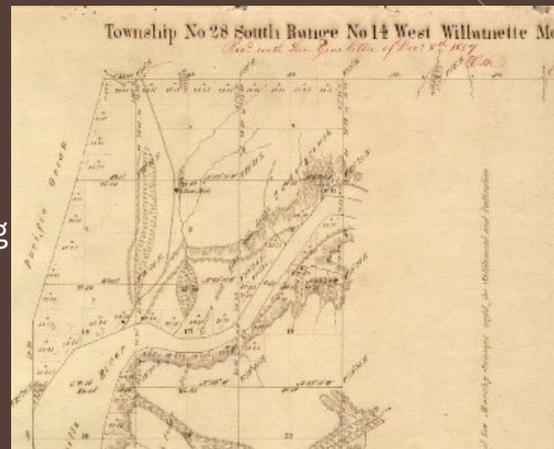
Wetland soil layers under lowland pastures may be mottled with rusty red and “gleyed,” where sticky gray soils reflect waterlogged, predominantly low-oxygen conditions that may not support mature trees with deep roots.

Fiscal year 2021 brought great opportunities to improve ranch operations and protect surface water quality with 38 individual Conservation Reserve Enhancement Program (CREP) contracts. CREP helps participating landowners to exclude livestock from stream corridors and to restore pasture riparian buffers for bank stability and habitat.

The minimum CREP Riparian Forest Buffer is 35 feet wide, enough to plant 2 rows of trees, interplant shrubs and establish a 10-foot grassy strip to sequester field sediments. Forested buffers are our most frequent project type in Coos and Curry Counties, but on sites where trees are not suitable, a 20-foot minimum Wildlife Habitat Buffer restores native grass communities interspersed with native shrubs for water quality and habitat benefits.

CREP requires forested buffers as the first choice. However, some soils do not support healthy trees. A narrower minimum width for non-tree buffers is an appealing option for landowners, but riparian restoration on historically unforested areas, including former wetlands and other areas inhospitable to trees, requires careful assessment of soils data and historic and current conditions, as well as, consultation with Oregon Department of Forestry.

CREP Wildlife Habitat Buffers (20-foot minimum) and Riparian Forest Buffers (35-foot minimum) both require appropriate restoration species and long-term control of noxious blackberry and other weeds. CREP provides financial assistance to fence and plant and annual payments for both buffer types. For more information about riparian buffers, or for help protecting your property's surface water, contact the CREP Tech at the USDA Service Center at 382 North Central in Coquille or call 541-396-2841 Option 5.



Historic observations, such as this 1854 GLO survey, provide valuable insights. Soils may not support mature tree roots even after decades of diking and draining on historic “low marshy swamps unfit for settlement and cultivation.”



Water-loving rushes and year-round standing water on lowland pastures may indicate current conditions not appropriate for tree roots. Careful assessment, soil data, and consultation with Oregon Dept. help determine suitability.

Contributed by Barbara Grant

# Meet our Board Members 2022

## MARK VILLERS CHAIRMAN

Mark W. Villers grew up in Coos Bay and has always enjoyed the outdoors—fishing, hunting, hiking, and camping. His work experience as a teenager included jobs at his dad’s printing office and a friend’s dairy farm. After graduating from Marshfield High School he started his career in carpentry, changed to timber falling by the mid-1980s, and soon advanced to cutting old growth trees, as well as working stints for Coos Fire Protective Association. By the mid-1990s biologists had realized that “stream cleaning” (removal of woody debris from streams) and other land use practices had severely damaged watersheds and their fish populations. In 1996 his company, Blue Ridge Timber Cutting, was awarded the first government (BLM) contract to pull over whole trees directly into a stream for fish habitat. Since then he has completed over 500 such contracts, including the first such projects in California and Washington (in 2013 and 2020, respectively). Mark feels that, while we may not be able to get back to the abundance of fishes in the distant past, it is very rewarding to see the uplift that has already happened and to help farmers and other land users find more environmentally- friendly ways to manage their land. It is for these reasons he has enjoyed serving on the Coos SWCD board for the past 12 years.



# Meet our Board Members 2022

## MICHAEL CLARY SECRETARY

Michael operates a small farm on the South Fork Coquille River, with projects that include riparian restoration, pasture restoration, off-channel refugia habitat enhancement, wetland enhancement, and forest management for wildfire prevention. In addition to the Coos SWCD, he serves on the boards of the Coquille Watershed Association, Lazy Grazers Refuge, and Myrtle Point VFW. Michael works as a senior project manager at Jacobs Engineering Group, and has broad interests in cooking, science, and music.



## CHARLIE WATERMAN VICE-CHAIRMAN

Charlie Waterman grew up on a ranch on Four Mile, south of Bandon. He graduated from Oregon State University in the field of Agriculture Engineering. His sheep flock put him through college. After graduation, he worked for Northwest Farm Credit Service as an agriculture loan officer. He purchased his first 40 acres of timberland at the age of 19. This year Charlie turned over the livestock operation to his son, Franklin. He continues to manage the timber side of the operation, serves on the Coos County Planning Commission and Coos Forest Protective Association Board and is an active member of the Coos-Curry County Farm Bureau.

# Meet our Board Members 2022

## ADELA VILLERS ZONE 1 DIRECTOR

Adela New Villers has been representing Zone 1 since 2015. She grew up on hobby farms in Eastern Washington and Eastern Oregon and attended Washington State University and Oregon State University for her Bachelor's and Doctor of Veterinary Medicine degrees. She has lived in Coos County for 27 years and enjoys country life with her husband, children, and animals.



## CINDY GANT ZONE 2 DIRECTOR

Cindy Gant is serving her third year as our Zone 2 director. Cindy supports Coos SWCD as we work with our constituents to protect, conserve and improve the quality of soil, water and other natural resources in Coos county.

Cindy graduated from Oregon State, receiving a Bachelor of Science in Business Administration, then moved to Coos County to start her banking career. Now retired, Cindy worked in banking for 26 years then as an administrative assistant for 14 years.

Cindy enjoys traveling, gardening, hiking and walking. She works in the family business and appreciates spends time with her parents and her in laws.

# Meet our Board Members 2022

## ERNIE NEWTON TREASURER

Ernie Newton is the treasurer for the Coos Soil & Water Conservation District. He has been married to the love of his life, Mary Lou, for 53 years now. They have two sons, four grandchildren and two great granddaughters.

Dee's Market is one of the oldest running family-owned grocery stores in the area, Ernie and Mary Lou owned it for 21 years, working side by side making it a great place for locals and tourists to shop.

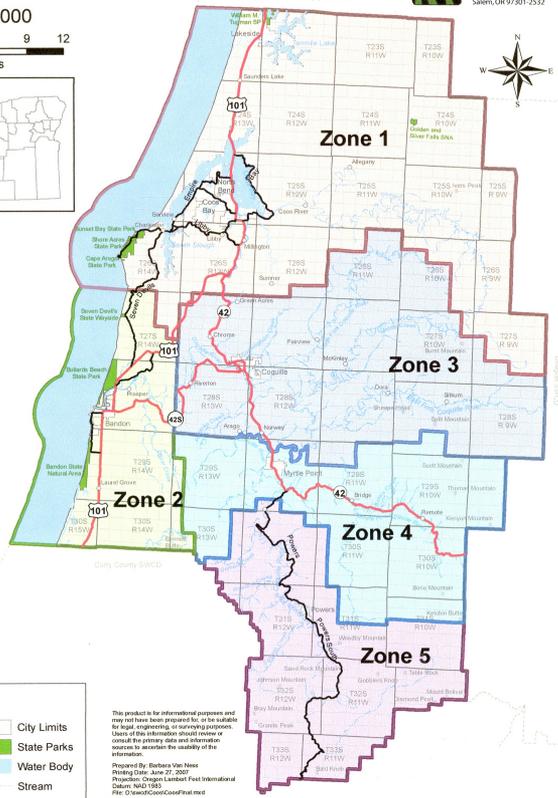
Ernie retired a few years ago, after many years of service at the Myrtle Point Water Treatment Plant. He is a life-long car enthusiast and even though he has spent the last twenty years restoring old pick-up trucks, he is now taking full advantage of his retirement spending his days at his shop with all of the old trucks he has collected.



## Coos Soil and Water Conservation District

1:450,000

0 1.5 3 6 9 12  
Miles



## ZONE 5 DIRECTOR VACANT

- Actively managing 10 or more acres in the zone that is being represented and residing within the boundaries of the district, or
- Residing within the zone that is being represented and actively managing 10 or more acres within the boundaries of the district, or
- Residing within the zone, serving at least one year in a SWCD At Large position or in a SWCD associate director position, and having a conservation plan that is approved by the district. This eligibility option does not include a requirement of active management of 10 acres or more.



## *Riparian Buffers on Agricultural Land*

Riparian buffers on agricultural lands provide a vegetated strip alongside waterways. They are important for a few reasons. First, riparian buffers reduce erosion, especially if native plants with dense root systems are present. Less erosion means better water quality and less of your valuable soil washing away. Riparian buffers with healthy plants are effective at filtering bacteria, nutrients, and other common pollutants.

Riparian buffers create habitat for fish and wildlife. Also, if a fence is present, a riparian buffer can protect livestock from drowning or getting hypothermia.

The Oregon Department of Agriculture does not require a minimum buffer width. However, Coos SWCD recommends the following formula for calculating a buffer width on a waterway:

Recommended buffer width on each side of a waterway =  $2 \times \text{Bank Height} + 10\text{ft}$

The bank height is the height from the water level during summer low flow to the top of the stream bank. For example, if a



stream has banks that are 5 ft high, the recommended buffer width would be 20 ft on each side of the stream. We encourage you to calculate a buffer width for your waterway and pace it out on the ground to visualize what the distance would look like. A number that looks high on paper usually looks more reasonable when visualized on-site. A small buffer is better than no buffer. Even a 5-10ft wide strip of grass on each side of a stream or ditch can filter most bacteria from livestock waste. A wider buffer may be necessary at locations with active erosion, especially on the outside of a big stream bend.

**"Recommended buffer width on each side of a waterway = 2 x Bank Height + 10ft" - Coos SWCD**

If you have a waterway that runs through a pasture, fencing will be necessary to protect your riparian buffer from livestock. If you intend to build a riparian fence, a wider riparian buffer is better than a narrow buffer. A wider buffer will give the waterway a bit more wiggle room and protect your fence. Although riparian plants slow down erosion, all streams move at least a little bit over the years and a stream can easily undercut a fence with a narrow buffer.

Just like agricultural land, riparian buffers require active management. This is usually in the form of weed control. Growing large, overstory trees in your riparian buffer can shade out most blackberries and other weeds. However, occasional weed control



will be necessary. Coos SWCD or your local Watershed Association can provide technical advice on how to manage riparian weeds. If you decide to fence your riparian buffer, ensure enough gates are installed to allow easy access inside the buffer for weed control and removing wayward livestock. A riparian fence is a big investment, and it will require occasional maintenance. Choose a style that will effectively stop your livestock and that will be reasonable for you to maintain. We encourage working with an SWCD or Watershed Association to design a riparian fence that works for you and your operation.

Recently, we monitored water temperature on a 1 mile section of a large stream that has a riparian buffer of 25ft on each bank. The buffer was planted about 20 years ago with willow and alder trees and fenced with electric fencing. The trees are now very tall and are shading the stream enough to keep the water cool enough for baby salmon and trout. We were excited to see that the water was much colder in this section of stream than in stream sections upstream or downstream that did not have nice riparian buffers. Seeing successful projects like this on the ground motivates us in the work that we do!

# Lampa Creek

This past year, Coos SWCD worked with three neighboring landowners on Lampa Creek to improve water quality, salmon habitat and grazing management. The landowners were concerned about erosion and invasive blackberries and wanted to improve the salmon habitat on their properties.

Lampa Creek is an important tributary of the Lower Coquille River for coho salmon, and it has relatively good water quality. Past tree-planting projects have helped cool the water and reduce erosion. However, there are still some problem areas and more work can always be done.

We were contacted by three neighboring landowners along Lampa Creek who wanted to improve the salmon habitat in the creek and address the problems of erosion and invasive blackberries. One of the landowners had also lost a few goats from drowning and hypothermia and wanted to keep them away from the creek.



The Coos SWCD staff visited the landowners and toured the properties to discuss the most beneficial solution. A section of the creek already had tall trees, intact banks, and very little blackberries, but other problem areas needed to be addressed. The creek had eroded the banks in a few places where there weren't enough tree roots to protect the soil.

Livestock were increasing the erosion by traveling up and down the banks. Also, a few large patches of blackberry needed to be removed. An old streamside fence was present but was at the end of its lifespan (about 20 years old) and needed to be replaced.



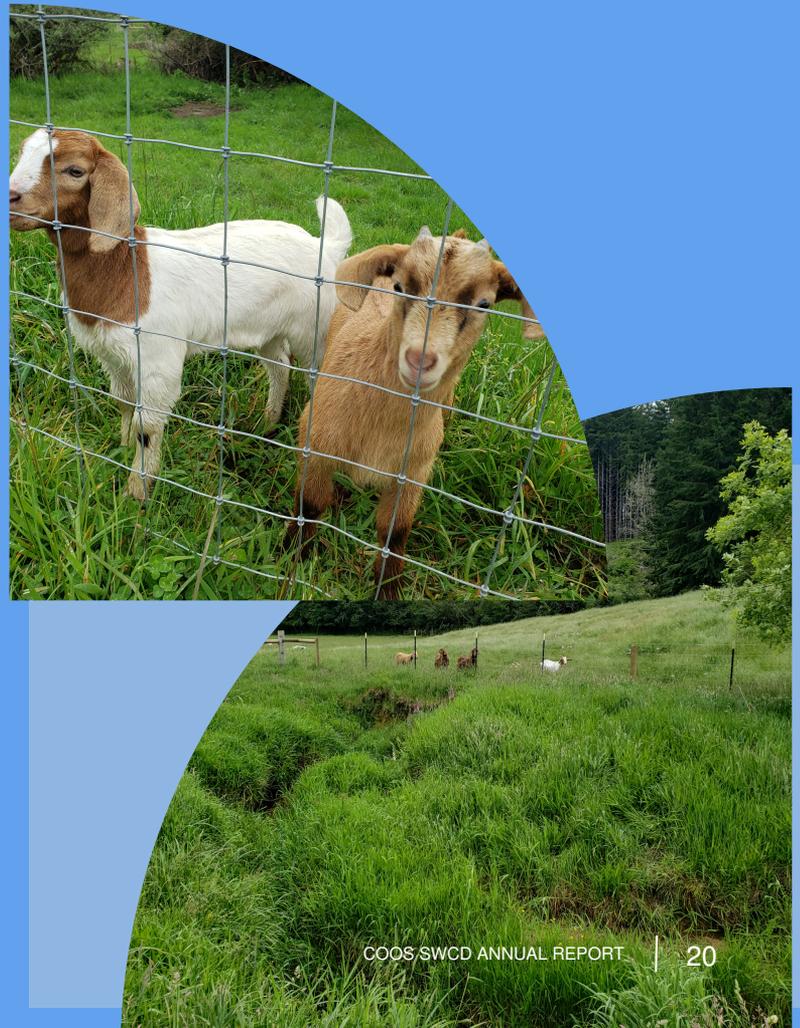
# Lampa Creek

## Continued



A major benefit for the landowners is that their pastures are now divided by the streamside fence. This has facilitated rotational grazing and also helped with separating the animals for breeding. Any new fencing on a ranch is an added maintenance responsibility. So...Coos SWCD designs fences to make grazing management more efficient to compensate for this. If you would like to consider streamside fencing for your property, we can help you design a system that meets your needs and protects your waterway.

After applying to grant funding for the project, Coos SWCD started by pulling out the old fencing and clearing the blackberry patches. We built a streamside fence during summer 2022 with input from the landowners to facilitate their access needs. So far, the erosion has stabilized and the banks are covered in green grass. This winter, Coos SWCD staff will plant native trees along Lampa Creek inside the fence. As the trees grow, they will shade the water and provide cover for juvenile salmon, and their roots will protect the banks from future erosion. The landowners provided input on the tree species that they would like. When the trees are planted, many of them will be protected with wire cages to prevent beavers from chewing them down.



# Temperature Monitoring

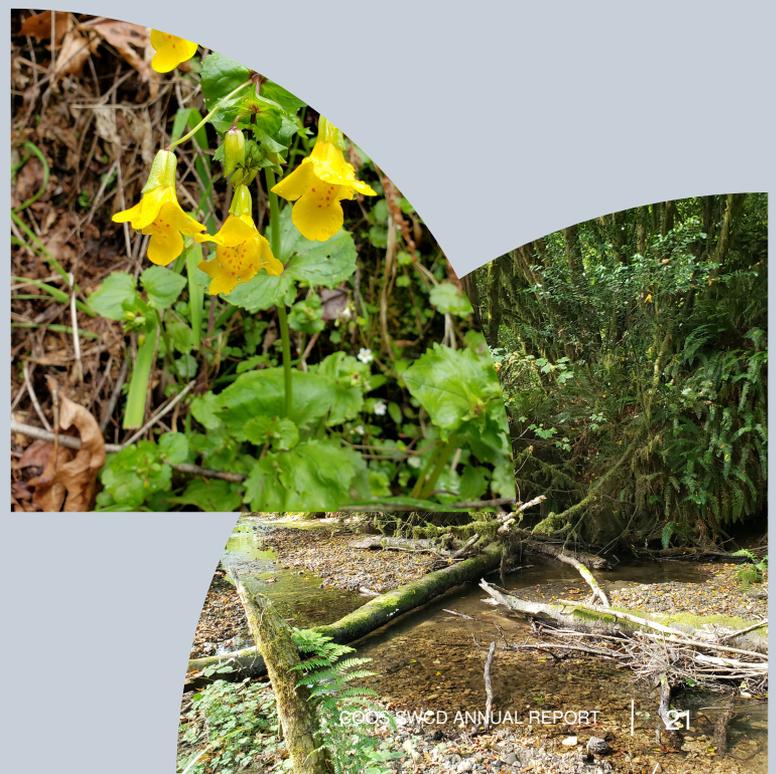


Water temperature affects the productivity and diversity of freshwater ecosystems. Species such as salmon require cold water to thrive. During the summer, warm water stresses and kills juvenile salmon if they can't find locations with cold water to rest and feed. Warm water creates favorable conditions for invasive smallmouth bass, and it also makes our waterways more susceptible to toxic cyanobacteria blooms.

The Coos SWCD monitors water temperature at many locations in the Coquille Basin over the summer. We use the data to inform landowners of the water quality conditions on their land and also to decide where to prioritize water quality improvement work. Making our waterways resilient to droughts and heat waves is important to maintain and improve salmon habitat and clean water. Our primary tool to keep water cool is to protect streamside trees where they exist and to plant more trees along streambanks that are bare or covered with blackberries.

"Water temperature is a catalyst, a depressant, an activator, a restrictor, a stimulator, a controller, a killer, one of the most important and most influential water quality characteristics to life in water."

The Federal Water Pollution Control Administration  
U.S. EPA (1986)



# Temperature Monitoring Continued



We started temperature monitoring on tributaries of the Lower Coquille River this year and will have a full set of data by December. "Electronic temperature loggers were placed in 19 locations in June 2022. They will be retrieved in October and the water temperature data will be downloaded and graphed" as Water Quality Project Manager Andrew Chione explains. "Once we have the data, we can use it as a tool to locate where water quality can be improved and where conditions are ideal."

It takes a community to take care of our shared water resources. Our water quality monitoring program would not be possible without the landowners who allow us to collect data on streams running through their property. If you are interested in participating in our temperature monitoring program, please call our office and ask for Andrew.





# OREGON DEPARTMENT OF AGRICULTURE STRATEGIC IMPLEMENTATION AREAS

- EVALUATING CONDITIONS ON AGRICULTURAL LANDS IN THE SIA
- ENGAGING LANDOWNERS ON WHAT CAN BE IMPROVED
- MONITORING WATER QUALITY TO SHOW IMPROVEMENT

The Oregon Department of Agriculture (ODA) is working to improve agricultural water quality in the state by creating Strategic Implementation Areas (SIA). This approach focuses on areas where agricultural water quality must be improved to protect public water sources. Currently, there are two SIAs in the Coquille Basin. The Lower Coquille SIA includes the Coquille River between Bandon and Coquille and its major tributaries. The water quality concerns here are insufficient riparian vegetation to keep water cool and bacteria pollution from livestock. The Lower North Fork and East Fork SIA includes the North Fork Coquille River and its tributaries between Myrtle Point and Fairview and the East Fork Coquille River and its tributaries up through Dora. The main water quality concern is livestock on riverbanks and in the water contributing to bacteria and sediment pollution. A major motivation for the creation of the Lower North Fork and East Fork SIA is to protect the drinking water source for the City of Myrtle Point.



Fortunately, most landowners in the SIAs are in compliance with agricultural water quality rules. However, if ODA has contacted you about water quality concerns on your land, please reach out to Coos Soil and Water Conservation District. We are a resource for voluntary conservation, and we have worked with several landowners in the SIAs to improve water quality on their land. We apply for grant funding to pay for most or all of the water quality improvements, and we design everything with the input and approval of the landowner.

A project we are currently working on is helping a landowner on the East Fork Coquille River reduce erosion. The river was severely eroding their property and they were concerned about losing more ground. Their first step was to keep cattle off the banks, which helped the banks stabilize and heal. We are going to plant willows this winter to further stabilize the banks and protect the property against future erosion.



If you live within one of the SIAs and would like help with water quality improvements, contact Andrew at (541) 396-6879 or email him at [WQprojectmanager@coosswcd.org](mailto:WQprojectmanager@coosswcd.org).



# WORKING LANDSCAPES OF NORTH BANK LANE



During the late 19th and early mid-20th century, most of the wetlands along the lower Coquille River valley were drained and converted for agricultural use, to take advantage of the fertile soils of the lower river valley, which are rich in organic matter and naturally sub-irrigated. In some areas, dikes or levees were constructed and tide gates were installed to allow freshwater to drain out, while holding back incoming tide water. It was a common practice for wetland channels to be ditched into straight lines to create square areas of land. This optimized the amount of grazeable land for livestock but reduced critical habitat for juvenile fish.

replaced to maintain healthy pasture lands. But to replace them in accordance with current fish passage regulations requires a complex technical process, often employing an engineer or private environmental consultant to assist with design and permitting. The average landowners in Coos County tend to lack the technical expertise, the time, or the financial capacity to complete such projects entirely on their own. Some landowners take matters into their own hands and perform repairs despite the regulations; however, this can expose the landowner to potential regulatory enforcement actions.



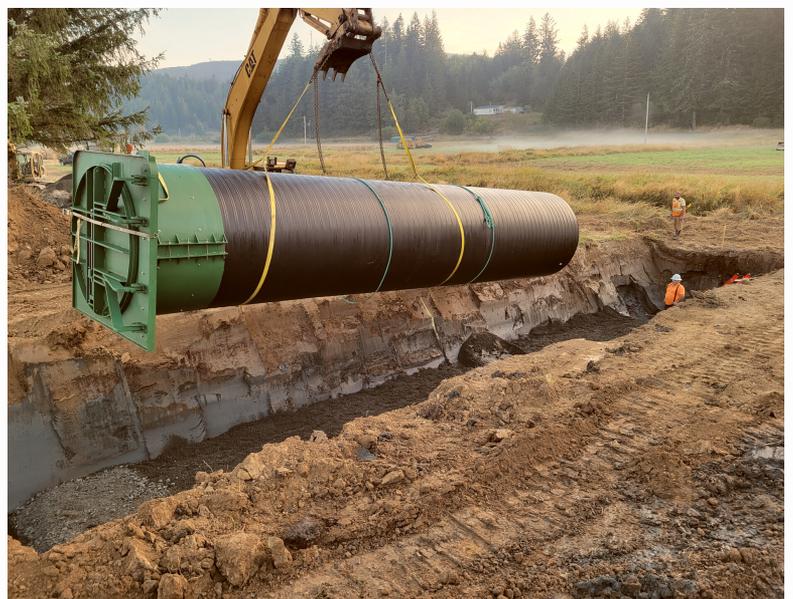
Over the years, increased understanding of the ecologic importance of floodplain habitat connectivity and slow water refugia to the salmonid life cycle have led to increased regulations regarding fish passage at both the State and Federal level. Many tide gates and dikes along the lower Coquille River no longer function well and need to be

Some landowners have partnered with local conservation groups such as the Coos Soil and Water Conservation District, Coquille Watershed Association, or Coos Watershed Associations, to pursue grant funding to pay for drainage infrastructure upgrades that comply with the fish passage rules. This has resulted in a new brand of



restoration projects, referred to as "Working Landscapes" projects. These habitat enhancement projects aim to rebuild agricultural drainage infrastructure and replace old failing tide gates and undersized culverts with new, fish-friendly designs and to partially restore tidal or wetland channel habitat on working farms. The Coos Soil and Water Conservation District is currently managing six Working Landscapes Projects in the Coos and Coquille basins, as well as supporting our partners, the Coos and Coquille Watershed Associations, with several ongoing related efforts.

Although not the first of its kind, the North Bank Working Landscapes Project is one such project aimed at tackling the problem of increased flooding and crumbling water control infrastructure on the lower Coquille. The owners of the North Bank project site first approached the Coos SWCD in 2017, with concerns about erosion of the dike that protected their farm from the river's salty high tides. From those early discussions, a plan was developed that proposed to not only repair the failing dike, but also to replace the old, 1ft diameter culvert and associated top hinge "mud flap" tide gate with a new, appropriately sized, side hinge aluminum tide gate. Drainage channels in the pasture would be redesigned and graded for better drainage and increased channel habitat complexity. Fencing would be built along the channels to protect them from livestock and native plants would be planted along the channels to stabilize the banks and provide fish and wildlife habitat.



## WORKING LANDSCAPES OF NORTH BANK LANE CONTINUED



In 2018, the Oregon Watershed Enhancement Board awarded \$58,333 to the Coos SWCD to design and permit the proposal. Since then, Coos SWCD has worked extensively with the Oregon Department of Fish and Wildlife, the Coquille Indian Tribe, and the landowners to make the project design a reality. An engineering consultant was hired to proof and vet designs and assist with permitting. Grant funding for construction was sought and delayed by the pandemic in 2020-21, but in September of 2022 Phase I Construction was completed, which saw the installation of a new 7.0 ft diameter Weholite HDPE culvert and side-hinge aluminum tide gate and MTR by Nehalem Marine, LLC. This will allow fish to have greater access to the site than they have had for nearly a century. The next Phase (Phase II Construction) will involve a pullback and reconstruction of the eroding dike, as well as construction of the re-meandering tidal channel network. The remainder of the proposed work is slated to be completed in 2023-24.

After completion of the remaining project objectives, a comprehensive solution to grazing and fish habitat will be created. The new tide gate is equipped with a Muted Tidal Regulator, which is a device that will allow tide water, and fish, to move into and out of the restored tidal wetland channels for longer windows of time, over greater portions of the year. The tide gate and MTR will be managed in accordance with a seasonal water management plan.

Typically, the gate will be set to close when the interior channels are full to prevent the adjacent pastures from flooding during times of year when flooding is undesirable. The pastures will be protected from tidal saltwater flooding in the summers, so healthy forage grass can grow for livestock grazing and hay production. During the winter season when pastures are not in use, a higher level of tidal exchange and flooding of the fields can occur. Fish will be able to move between the river and wetland channels with every tide. This is very important because once in the wetland channels, fish are better able to forage for food without worrying about the heavy currents and predatory bass in the lower Coquille River mainstem. Studies have documented that juvenile coho salmon that have access to wetland channels for rearing grow larger and have a higher chance of survival on average than fish reared in the mainstem river. The project is also designed to gradually provide some thermal refugia in the summer, when the mainstem river reaches temperatures that can be devastating to juvenile salmonids.