

COOS SOIL & WATER CONSERVATION DISTRICT

FALL 2019 NEWSLETTER



COOS SWCD

379 North Adams St.
Coquille, OR 97423

PLEASE
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STAMP
HERE



Watershed Technical Specialist Brian Lovejoy

My name is Brian Lovejoy and I am from Chicago, IL. I am a distance runner, movie watcher, and D&D enthusiast! I received my B.A. in Environmental Studies and Geography from Augustana College in Rock Island, IL and my M.S. in Natural Resources Management from Western Illinois University. I like outdoor activities like fishing, hiking, and camping, but also enjoy reading and board games with friends. I will be moving about 1700 miles from home because I feel that working as a member of this team is a fantastic opportunity to help manage the environment sustainably with a great group of devoted people. I look forward to meeting and getting to know all of you!

Grants Available for Conservation & Agricultural Best Management Practices

The Coos Soil & Water Conservation District (Coos SWCD) works directly with landowners on a voluntary basis to address resource concerns and improve farm and ranch management capability. We are a strictly non-regulatory, and entirely grant-funded local organization. Our technical assistance is always free, and in some cases, we may even be able to help secure additional financial assistance to implement farm-friendly conservation practices that improve water quality and enhance fish and wildlife habitats. We also partner with other local organizations such as the Coos and Coquille Watershed Councils, Natural Resource Conservation Service, and Oregon Department of Fish & Wildlife to implement large-scale conservation projects. If we can't help you, chances are very good that we can connect you with someone else who can!

Every site and property is different and must be assessed individually. However, some very common resource concerns that the Coos SWCD can help with include: streambank erosion, manure management, culvert replacements, grazing and other livestock management issues, drainage (including ditches, dikes, berms, and tidegates), livestock fencing and watering systems. New landowner or manager? Coos SWCD can help you develop a USDA Certified Conservation or "farm" plan for your property. If you have a resource concern, but don't know where to start, contact our office at 541-396-6879 or email us at info@coosswcd.org to find out what options are available.



Collapsing culvert replaced with concrete slab bridge at a livestock crossing



Four-bay manure storage and composting facility installed at a local horse boarding operation



Improvements to irrigation system efficiency to reduce water waste and landowner labor

How Might the Water Scarcity or Quality Affect Agriculture in Coos County?

By Courtney D. Jeffs



1st place: Courtney D. Jeffs
(11th Grade) Marshfield High School



2nd place: Karis Kohl (9th Grade)
North Bend High School



3rd place: McKinley Abbott
Warncke (6th Grade)

Water scarcity and quality can drastically affect the agriculture of Coos County. We will explore the issues of the topic and how it impacts our community.

Agriculture is one of the most important necessities that we have in the Coos County area. We depend on livestock, produce, and other products that agriculture can produce. When it comes to water scarcity and quality, it is important for us to maintain a sufficient amount of water in adequate quality so that our community can continue to thrive.

One of the issues we face today as a community, is a growing population. With the population getting larger in our area, we have been required to enhance agriculture so that we can harvest produce much faster. This enables us to provide enough produce for everyone in the area when they need it. Most farmers use plant growth regulators to accelerate the growth process of the produce, however, they also use herbicides to kill weeds, insecticides to kill the bugs, and fungicides to get rid of the diseases the plants may obtain. When these chemicals are used for growing crops, it increases the risk of contamination in our water. The chemicals cause a discharge of water pollutants that spread across the surface of the water creating bacteria. When this occurs, water quality is susceptible to disease, sickness, and viruses. If the water quality were to be insufficient, we would be using contaminated water to grow our produce. If the water were to be contaminated, it would not only impact the environment, but it would cause the farmed produce to be polluted.

When water quality is insufficient, it concerns more than just produce, it can have an effect on the livestock on our farms which is a large part of the agriculture. If the water quality were to have chemical pollutants, the livestock would be in danger of getting a virus or disease. If that were to happen, the products we gain from livestock such as milk, cheese, meat, would also be infected with contamination.

The scarcity of water, even if it were to be sufficient quality, would be a major issue for both livestock and crops. If we had a scarcity of water in the Coos County area, we would not be able to grow our produce because crops are dependent on water to grow. Growing crops is dependent on a large amount of water, so if the water were to be scarce, we would not be able to harvest. It would not only influence crop growth, but it would also alter livestock and how they live. Livestock require almost as much water as farming crops does, if the livestock were not able to have enough water, they would be unhealthy and dehydrated, ultimately ending in death.

Our area would face water scarcity if we were to have a drought, luckily, Coos County has not had a drought or water scarcity in a few years.

With the evidence provided, we are able to conclude that agriculture is a critical system for our county to strive and maintain a high yet healthy population.

Noxious Weeds

Noxious weeds pose serious threats to the Southern Coastal economy and ecosystem. Noxious weeds are nonnative plants that have been legally designated as major pests because they cause economic loss or harm the environment. Most noxious weeds prefer disturbed and heavily used areas. Timberlands, roadways and agriculture lands are highly susceptible to noxious weed infestations. Once established, noxious weeds are extremely difficult to control without the use of herbicides. Early detection of priority noxious weeds is critical to our local economy and needs to be addressed within the entire district. In 2018, with funding from the Oregon State Weed Board and in partnership with the Coos County Noxious Weed Control District Advisory Board, a new project to reduce the spread of noxious was launched.

The Coos County Early Detection Rapid Response (EDRR) Strike Team brings community awareness of the County's listed noxious weeds, shares expertise on identification, maps local infestations and takes active control measures to reduce the impact of noxious weeds in our area.

For more information or to report noxious weeds contact the Coquille Watershed Noxious Weed Program Manager-Goldie Warncke at (541)396-2541 or by email at gwarncke@coquillewatershed.org

Coos County 2018 Listed Noxious Weeds



Knotweeds aggressively take over stream banks, gravel bars and floodplains.



Ingestion of milk thistle by grazing animals causes nitrate poisoning which can be lethal.



Gorse is highly flammable, volatile noxious weed that poses an imminent threat of catastrophic fires.



Yellow Flag Iris is poisonous and toxic to most livestock.



Blackberry is common throughout the County and can be found along roadsides, in woodlands, pastures, riparian areas, ditches, and fencerows.



Old Man's beard is an aggressive climbing vine that can climb over and smother native vegetation, including whole groves of mature trees.



Creeping buttercup, the entire plant is toxic (sap, flowers, seeds, leaves) but the greatest concentration is in the yellow flowers.



English/Atlantic ivy is a fast growing vine that swallow trees and prone to falling during drastic weather patterns.

South Coast Cooperative Weed Management Area

Together We Achieve More!

The Mission of the South Coast CWMA is to reduce the negative impact of invasive plant species on the economy, environment and human health by collaborating with the community through education, information exchange and coordinating regional efforts for control. Our members recognize that invasive plants and noxious weeds adversely affect native plant and animal communities, reduce water quality, impair forest and agricultural productivity, and subsequently negatively affect the economy.

About Us

The South Coast CWMA members are dedicated to invasive species management. Our members include professional weed managers representing many government agencies, private and commercial applicators, non-governmental organizations and concerned citizens.

For more information on the **South Coast CWMA** contact Goldie Warncke-South Coast CWMA Coordinator gwarncke@coquillewatershed.org



Noxious Weed Highlight—Knotweed

What is knotweed? Knotweeds are native to Central and Eastern Asia, but were brought to the U.S as ornamentals. There are several varieties of invasive knotweed in Oregon. Himalayan, Japanese, Bohemian and Giant knotweeds are all found in Coos County. These fast growing bamboo-like plants are capable of reaching 15 to 20 feet tall. Once established the plant's massive underground creeping rhizomes are VERY difficult to destroy.

Why is knotweed a problem? Knotweeds aggressively take over stream banks, gravel bars and floodplains. Replacing available areas for native vegetation to grow. Researchers have found chemicals within knotweed leaf litter inhibits growth of other plants near knotweed infestations. Knotweed natural winter dieback creates expanses of river bank exposed to erosion from winter/spring storm events.

Where is knotweed in the Coquille watershed? Knotweed is currently known in the North Fork, Middle Fork, lower South Fork and the main stem of the Coquille River, Coos County, OR. Japanese is common but giant is the dominant species.

How can you control knotweed? Research has consistently shown that only systemic herbicides are cost effective at controlling or greatly reducing knotweed. If treating with herbicides please check the label and use only aquatic and mammal safe herbicides near water. Methods, such as cutting and mowing, can spread fragments or trigger the plant's defenses to grow thicker and wider. This makes the situation worse!

Countless landowners have contacted us about their struggles battling knotweed for years, only to learn that mowing has created more problems. Digging up knotweed roots, can spread the plant elsewhere when transported in fill dirt. Broken vegetative stems that are often transported via river water can create new populations as well. The good news is that with the cooperation of everyone, we can control the spread and eliminate the threat of invasive knotweeds from our County!



Knotweed at Sturdivant Park before treatment



Knotweed after herbicide treatment in February 2019

Tidegates – What are they and how do they function?

Tide gates are structures that control the flow of water during high and low tides, and many are located throughout the lowlands of the Coquille and Coos Basins. Tidegates close during the period of high tide to protect farms, structures, and roads from inundation. When the tides recede, the gates open to allow for drainage.

Tidegates are critical elements of drainage infrastructure that have been used in Coos County for over 100 years. Historical tidal wetlands and floodplains were diked and tidegated to develop the pastures and infrastructure that we have today. As of 2019, existing inventories in both basins estimate that Coos County has 274 tide gates servicing over 18,000 acres of both public and private lands.

Tidegates have supported agricultural operations and families in Coos County for decades. However, older-style top-hinge tidegates have caused impacts to public resources including salmon, Pacific lamprey, waterfowl, and water quality. Specifically, tidegates restrict juvenile coho salmon access to critical floodplain rearing habitat during their winter outmigration to the ocean. These habitats are rich in food sources and provide slow moving refuge during high flow events.

Over time, tidegates degrade and fail, requiring replacement. Replacement of tidegates can be challenging and expensive as fish passage regulations require upgraded infrastructure that meets the needs of public resources while maintaining the use and productivity of the site. Failing tide gates and associated drainage issues reduce the productivity of the land for ranchers *and* for fish and wildlife.



Tidegate Replacements and a Thriving Coastal Economy

Tidegates contribute to a thriving coastal economy that includes the diverse industries of agriculture, commercial and recreational fishing, tourism, and forestry. Despite the challenges, it is possible to replace a tidegate with new ‘fish-friendly’ designs that meet regulatory requirements while sustaining and improving our local agricultural economy and maintaining our natural resource-based industries. Through the new Tidegate Outreach and Engagement Project, The Coos SWCD and Coos and Coquille Watershed Associations are teaming up to form a non-regulatory, “full-service” resource to help landowners navigate the challenges of replacing and maintaining tidegates. For more info, contact any of the team members below.

Coos-Coquille Comprehensive Tidegate Outreach and Engagement Project Team:

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