



COOS SOIL AND WATER CONSERVATION DISTRICT 2015 NEWSLETTER

Coos SWCD Issues Call to Landowners to Make Use of OWEB Small Grant Funds

The Oregon Watershed Enhancement Board (OWEB) is a state agency that provides grants to help Oregonians take care of local streams, rivers, wetlands and other natural areas. OWEB grants are funded from the Oregon State Lottery, federal dollars, and salmon license plate revenue. OWEB offers a variety of grant types and programs.

The Small Grant Program in particular is an easy-to-engage-in, competitive grant program that awards funds of up to \$10,000 for on-the-ground and in-stream restoration projects. Oregon is currently divided up into 26 Small Grant Team (SGT) areas. The Coos/Coquille SGT was allocated \$100,000 for the 2015-2017 biennium.

Last biennium, the Coos Soil & Water Conservation District (Coos SWCD)

submitted 6 high priority applications for funding through the OWEB small grant program. Five applications were approved, and three are complete. The other two are currently working with Coos SWCD to be completed. The projects consist of one irrigation efficiency projects, one fencing and off-channel watering, manure management facility, a heavy use area improvement and a riparian restoration project. The total amount of OWEB small grant funds awarded to these 5 projects was \$45,000. Other organizations in Coos County who can apply for small grants on behalf of landowners include the Coquille Watershed Association, Ten Mile Lakes Basin Partnership, Coquille Indian Tribe, and the Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians.

The Coos SWCD would like to issue a call to all agricultural landowners to make use of the small grant funds. Projects must have a direct benefit on improving in-stream process and function, fish passage, wetland and

riparian process and function, road impact reduction, or water quality.

Some examples of project types include fencing to exclude livestock from riparian areas, planting to restore riparian areas, developing and installing off-channel watering for livestock, irrigation efficiency improvement, and culvert replacement.

Once a grant is submitted and approved, landowners have two years to complete the project. The review process on small grant applications usually takes less than 60 days.

If you are interested in learning more on how Coos SWCD can assist you with options to improve your land, please contact the Coos Soil and Water Conservation District office in Coquille at 541-396-6879 for more information or email us at info@coosswcd.org

The Guerin Memorial Essay Contest

By: Anne Guerin

The Coos Soil and Water Conservation District directors have honored the memory of Dorothy Guerin for 33 years by sponsoring the Guerin Memorial Essay Contest, and 11 years ago including her husband Tom, who was a director for many years. Before her early death in 1980, Dorothy worked in the CSWCD office, a position she very much enjoyed. Tom initiated the memorial in 1982, which has been sustained over the years by generous donors both on and off the board of directors.

The essay contest promotes an opportunity to engage young people in Coos County in research and reflection on natural resource issues that are important to the county and the state as a whole. The topics emphasize conservation practices that protect land and water values. The winner receives a plaque to be displayed in his/her school for the remainder of the year, plus \$150. Second place winner receives \$125, while third place winner receives \$100.

A bit of personal history: Tom and Dorothy were good examples of the impact of education and exposure to better practices by their involvement with the CSWCD. With no garbage service on their ranch south of Myrtle Point, tin cans, once emptied of their contents, were tossed down the hill by the garage, some of them eventually tumbling into the creek that ran by our old ranch house. That practice stopped. In an attempt to reduce erosion on the banks of the Middle Fork of the Coquille that ran beside the Bull Pasture, Dad had old car hulks planted. That, too, was no longer done.

Tom saw that new and better practices needed to be implemented. Perhaps some of these young essay entrants will eventually become farmers, ranchers, or loggers, and will also strive to adapt their ways to what is going to better protect the land and water where they live and work.



The contest is open annually to all Coos County students (including home-school students) from grades 7 through 12.

Essay Guidelines: Select one essay topic out of the four provided. The essay must be a minimum of 500 words, and should show that the writer has researched the topic and understands the issues.

1. Explain how conservation practices used by landowners (farmers, ranchers, timber holders) can benefit water quality in Coos County/Oregon.
2. What conservation practices used by landowners and/or the public in Coos County are utilized to protect soil and decrease erosion?
3. How have farming, ranching, or timber land management practices changed over the last 100 years to protect the environment and water quality in Oregon or Coos County?
4. What is the impact of WOTUS (Waters of the United States) on Coos County agriculture operations and what conservation techniques could be used to mitigate impacts?

The essay should have the following heading on the top of the paper: student's name, essay title, school name (or home schooled), age, grade, and phone number. All applicants must provide four copies of their essay to the Coos SWCD office in Coquille by 4:30 p.m. on November 13, 2015. Students are encouraged to carefully edit their essays. Typed essays are preferred but legibly written essays in black or blue ink are acceptable. The winners of the contest will be notified and awards presented at the Coos SWCD Annual Meeting.

First Place-\$150, Second Place- \$125, Third Place-\$100

The Winners of the 2014 Guerin Memorial Essay Contest:

Each year, the winners of the Guerin Memorial Essay Contest are invited to attend the Coos SWCD Annual Meeting and Dinner, where they are asked to read their essays to everyone. They are then presented with certificates of award, cash prizes, and, in the case of the first place winner, an engraved plaque to be displayed at their school for the rest of the year. The 2015 winners will be presented at this year's annual meeting, date still to be determined.

First Place: Sabrina K. Smith Coquille High School, Grade 10



What Conservation Practices Used by Landowners and/or the Public in Coos County are Utilized to Protect Soil and Decrease Erosion?

Oregon is a beautiful state with many different surroundings. In fact, we Oregonians have miles of beauty all around us, but also miles of land that have the chance to be ruined if not taken into consideration and cared for correctly. Luckily the people of Coos County realize that our environment must be cared for and not blindly used and tossed away. That's why there are so many kinds of conservation methods for our soil, water, and other resources. Three main conservation tools that are used here in Coos County for soil preservation are leaving trees around creeks when the land around it is being logged, tree planting around tributaries to prevent soil erosion, and fencing land around waterways when farm animals or vehicles are moving around it. First, if foliage has not been previously removed, then maintaining a buffer between human activity and waterways is essential.

In Coos County the local Coquille Indian Tribe is a prime example. They help conserve soil and water by keeping a 100 foot buffer of foliage between logging and creeks/wetlands. In fact, "A 2007 timber cruise identified a 1.5 acre perched (non-riparian) wetland near Mead Creek in the Coquille Watershed that the Tribe voluntarily protected with a 100-foot no harvest buffer" (Duggan). This is only one of many places that are protected, and plans are going into motion to protect as much as the tribe can on their 5,400 acres of the Coquille Forest in the Coquille River Watershed as well as to promote others to restore and conserve their land.

Next, if foliage around waterways has been cut down, then planting the new riparian zones to stabilize banks is important. Jim Hutchinson, Program Manager of the Oregon Stewardship, leads a program through some of the coastal schools like Coquille High School where he works with students on environmental projects in the area. For example, I was part of a internship this summer with Mr. Hutchinson where we worked around Cunningham Creek planting, watering, weeding, and occasionally feeding trees and shrubs to stabilize the banks.

On a similar note, Coos County farmers block waterways from their livestock to prevent soil erosion and water pollution. "The fences allow for eroded banks to heal themselves and also allows for the chance to establish a new riparian area by planting trees and shrubs..." Coos Soil and Water Conservation District). If farmers weren't going to fence off waterways from their livestock, the livestock knock sediment into the creek. Normal sediment would be one thing but as Marilyn Thelen said, "The problem with sediments is intensified when the sediments also contain livestock manure from the areas where livestock congregate".

In conclusion, the people of Coos County have come to realize that the land around them is a precious thing that should be protected. Three main methods of conservation that have been put into use include the following: tree planting around tributaries to prevent soil erosion, leaving trees around creeks when the land around it is being logged, and fencing land around waterways when farm animals or rigs are moving around it. Personally I'm grateful for the conservation because I love working with Cunningham Creek and love the beauty of nature.

Second Place: Steven Tall Hunter

Myrtle Point Jr. Senior High School Grade 7



Conservation Practices Used to Protect Soil and Decrease Erosion in Coos County

We have many conservation practices used by landowners and the public in Coos County. Due to our heavy rainfall, and our large use of pasture land for cattle grazing though, we have a soil erosion problem. Farmers in this community practice a lot of techniques to help prevent soil erosion. Ranchers work hard to keep their livestock from damaging riverbanks and pasture land. The public helps prevent soil erosion by being responsible with their recreational activities.

There are many techniques used by farmers to prevent soil erosion. One practice used is planting vegetation on the banks of rivers to help hold the soil together. Another way farmers help stop soil erosion is crop rotation. Crop rotation is here farmers plant a different crop in that field every year so as not to lose all the nutrients in the soil. Farmers also have to have proper drainage for irrigation. Otherwise if you over irrigate the water will pool up and create a big puddle, or run off in one direction that will erode the soil beneath it.

Ranchers use many practices to help stop the erosion of soil. Cattle do a lot of damage to soil, so one way ranchers help stop that is by fencing the cattle away from rivers. When the cattle aren't fenced off, they walk along the banks causing the soil to fall into the river. Another technique is cross fencing. Cross fences are fences installed inside a perimeter fence to divide a grazing area into two or more separate paddocks. Doing this helps stop the cattle from tearing up the ground too much, and causing runoff instead of the water soaking into the ground.

Being responsible is a big way the public helps prevent soil erosion. When doing recreational activities like dirt bike riding and horseback riding people try to make sure they're doing it in the right place. They are careful to stay in designated areas and on the right paths or trails. People also try to do these activities during the right time of the year. For example, they don't do these things in winter when it's usually muddy because it will tear up the soil. Most important of all, people try to do these things safely so not to get injured. Another way the public can help stop soil erosion is by planting groundcover. That way the roots of the plant will help hold the soil together.

There are many ways to help prevent soil erosion. Most of the techniques used by farmers, ranchers and the public are easy. A few things I think should be done are simple. We need to educate the public more about soil erosion and how they can help stop it. I have seen many of these techniques used on farms and ranches around me, including my own. All of these conservation practices can greatly help stop soil erosion.

Third Place: Cody Sears

Myrtle Point High School, Grade 9



How have farming, ranching, or timber land management practices changed over the last 100 years to protect the environment and water quality in Oregon or Coos County?

Between the 1900's and the present day, the timber land management practices have altered considerably. How have they changed? Are these changes beneficial to our environment? Many timber land management practices and laws in the last 100 years have changed to help preserve the environment and water quality. Some such changes include: restriction of logging areas, technology advancement, and habitat preservation.

To protect our environment, the government has

enforced new laws that require a logging company to reforest the area to replenish the renewable resources that were depleted, Oregon Administrative Rules chapter 625 division 665 was introduced in 1995 to do just such. It outlines the types of trees to be replanted, the amount of trees per acre, and the amount of time a company has to do so.

Another item that has changed to maintain the environment would be the advancement of technology. In the early 1900's, trains and horses were commonly used for transportation and extraction of the logs. Mid 1900's we see the development of primitive log trucks. Today, with the help of science, we have much more developed machinery that produces less pollution than earlier models.

Along with environmental preservation, loggers must consider the affects logging might have on water supply. The protection of water quality is a major concern. To ensure our water supplies are kept clean and unpolluted, the government has enforced the law OAR chapter 629 division 625. This law sets guidelines for building roads, it states where a road may be placed and how to refrain from damaging nearby water sources. OAR also restricts logging and removing vegetation from nearby water sources. Often when logging takes place and vegetation and trees are removed, landslides and erosion occur, causing pollution to our water sources and damaging fish and wildlife habitats.

Without the laws protecting wildlife habitats and water quality, fishing and hunting would be scarcer in this area. This would affect my family's ability to survive, we rely on hunting to provide meat for the winter.

Some innovations have not necessarily been improvements to the conservation of the environment and water quality; however, the majority of such advancements has enhanced our ability to do so. Many people would argue that we create more pollution with our technological advancements, and that may be so, but when we consider the entire picture we see that the efficiency and safety of logging has improved.

Due to the restrictions and laws on logging practices, we have managed to preserve the environment and water quality needed to sustain and improve life. Without these laws, our individual and community environments would be forever altered. The wildlife would be forced out of their natural habitats, fish populations would be depleted, and core food sources for humanity would be lacking.

Coos Soil and Water Conservation District 2015 Annual Meeting

The Coos Soil and Water Conservation District 2015 Annual Meeting will be held Thursday, December 10, 2016, from 6:00-9:00PM, at the Coos County OSU extension building at 631 Alder St, Myrtle Point, OR 97458. There will be dinner and refreshments followed by a presentation from guest speaker Gregory Wacker, our District 19 Water Master, Cooperative of the year awards, and door prizes.

Ann Guerin will also award prizes to the winners of the Guerin Memorial Essay Contest.

Dinner is \$8.00 per person, please RSVP by December 5th to the Coos Soil & Water Conservation District either by calling us at 541.396.6879 or emailing us at info@coosswcd.org to reserve your spot.

Fencing & Pasture Management for Livestock & Wildlife Workshop

On May 28, 2015, Coos SWCD teamed up with other agencies to give the public a free workshop to assist landowners in improving their fencing and pasture management for livestock and wildlife. The workshop had an attendance of 43 landowners from Coos and Curry County.

Guest speakers included Randy Bailey from Gallagher Fencing who did an informative demonstration of the latest fencing options which included containment & exclusion fencing techniques. Barbara Grant of Curry SWCD and the Conservation Reserve Enhancement Program (CREP) was also present to answer questions and suggest funding options to landowners; Jeff Jackson with Oregon Department of Fish & Wildlife (ODFW) informed participants of different ways to deal with elk issues they may be experiencing on their properties.

Other topics included...

- ◆ Different fencing options (electric & wire fence)
- ◆ Large & small stream bank stabilization tactics
- ◆ Pasture management for increased forage yield
- ◆ How to save time, labor & money with a power fence
- ◆ Riparian restoration & fencing using Farm Bill programs



Photos courtesy of Coos SWCD staff



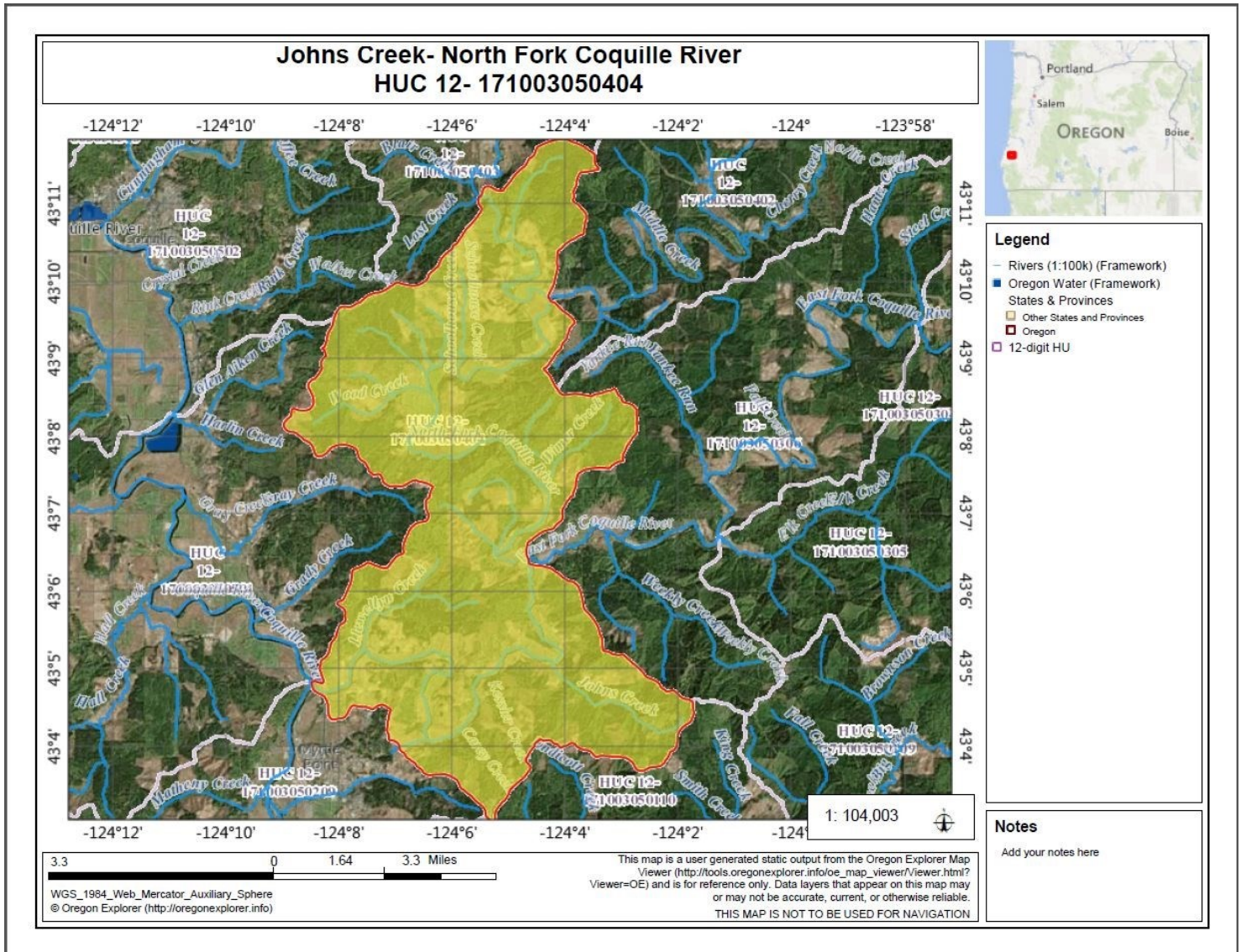
A special thank you to Carolyn Crane for allowing us to use her property for our workshop.

Have a new idea or topic for a workshop or class? Please feel free to contact the SWCD District office. We host several workshops throughout the year and we would love to know what you are most interested in learning about to improve your land.

Coos Soil and Water Conservation District
371 N. Adams St. Coquille, OR, 97423
Phone: 541-396-6879
Email: info@coosswcd.org

Funds available for the Lower North Fork of the Coquille River

The Coos Soil & Water Conservation District will provide assistance to willing landowners in the Lower North Fork Focus Area in the developing and utilizing their resources to reduce soil erosion, conserve and improve water quality, maximize crop and forage production, improve fisheries habitat, and to support the economy of Coos County, as well as offer funding sources to achieve these goals. If you are located in the surrounding area and would like us to visit your property to discuss what we can do for you, please contact us at 541-396-6879.



The lower North Fork of the Coquille (HUC 171003050404) is approximately 18,947 acres. Approximately 90% are privately owned. 10% are federally or locally owned (mostly BLM, some County). Land use in this watershed is approximately 60% agricultural 28% forest, and about 10% forested mixed use with ag, 0% urban, and perhaps 3% rural residential. The main agricultural uses include second growth forestry, hay, and cattle grazing. There are approximately 482 agricultural tax lots in this area.

“The North Fork Coquille River from river mile 0 (confluence with South Fork Coquille to form the Coquille R) to RM 27.9 is included on the State of Oregon 303(d) list for failing to meet water quality standards for dissolved oxygen. The reach is listed year-round because it does not meet the 8.0 mg/L non-spawning DO criterion. In addition, the reach from RM 0 to RM 18.5 is also included on the 303(d) list for DO for failing to meet the 11.0 mg/L resident trout spawning criteria which applies from January 1 to May 15.”

(Coquille TMDL: North Fork Coquille River Regression Analysis, Draft July 2010)

WANTED

INVASIVE

Japanese and Himalayan



Photo by Britt Slattery,

Knotweed is an ornamental plant native to Asia. Japanese knotweed is characterized by a wide, heart-shaped leaf, and Himalayan knotweed has an elongated leaf. Both types have bamboo-like, green or reddish stems, and bright green leaves 1-12" wide with smooth edges. Knotweed begins its growth in April, and by July it can reach a height of 12 feet! Large spikes of small, white flowers bloom in late summer. In the winter months, although the plant lies dormant and dead, brown stems may remain standing.- When it colonizes in areas such as the Coquille watershed, it out competes and permanently displaces native vegetation. It is extremely aggressive and grows very quickly - up to a foot a week. Native animals and fish cannot use it for food or shelter. Therefore, knotweed destroys terrestrial and aquatic habitat that would otherwise be suitable for wildlife. The food chain could also be disrupted because knotweed takes nitrogen out of the soil without replacing it with leaf litter. Knotweed is most commonly found in the flood plains along rivers and streams. However, it will thrive in any moist soil or river cobble in full or partial light. It is important that you avoid cutting down the knotweed because it can regrow even stronger and small cuttings of the plant can re-sprout elsewhere if not contained.

If you have seen this plant on your property, please contact the Coos SWCD

541-396-6879

OFF-CHANNEL WATERING FOR LIVESTOCK

Source: Fact Sheet No. 9: Providing Stockwater in Fields and Near Streams- Tips for Small Acreages in Oregon. Washington County SWCD, 1999.

Livestock that are allowed free access to drink from creeks, streams, and rivers may be more at risk for potential health problems and decreased productivity. If you own pasture that borders a stream or river, you probably already know the environmental benefits of keeping animals away from sensitive riparian areas and streambeds. But, did you know there are also substantial animal health benefits to restricting livestock access to waterways?

It is commonly known that stream protection practices such as watering troughs, stream crossings, livestock fencing and stream buffers help reduce sediments and livestock nutrients from entering our waterways. Just as importantly, however, these practices can reduce health problems, increase milk production and minimize infectious diseases and physical damage to dairy and beef herds.

A watering trough provides a safe, clean, reliable water supply for animals away from streams. Most farmers report that livestock prefer watering troughs to streams and springs. It has also been shown that livestock gain up to 30 percent more weight on clean water and graze more efficiently when troughs are distributed throughout pastures.

Animal Average Drinking needs*

Dairy cow 27 gal/day
Beef cow 12 gal/day
Horse 12 gal/day
Pig 8 gal/day
Sheep 4 gal/day
Goat 4 gal/day

*On hot days, animals may need twice as much water.



Environmental Benefits:

■ **Efficient Pasture Management:**

A selectively placed watering trough can make pasture management easier. Having multiple troughs in a pasture also allows for the opportunity to install cross-fencing and to rotate cattle from field to field (known as rotational or intensive grazing). This practice can enable a landowner to get the most out of his or her pasture without over-grazing.

■ **Reduced Erosion:** Watering troughs help reduce stream bank erosion from messy or muddy areas caused by regular animal traffic. One study found five times the number of trout in streams with non-eroded banks versus those with eroded banks.

■ **Cleaner Water:** Clean water is essential to people, fish, and the environment. When livestock deposit manure near or in water, the components of manure may be harmful. Phosphorus increases algae blooms, ammonia kills fish, and coliform bacteria can sicken or kill people with weakened immune systems.

■ **Riparian Habitat:** The trees, shrubs, and tall grass next to streams provides food and cover for 74 percent and 94 percent of western and eastern Oregon wildlife, respectively. One study found 89 different bird species on un-grazed banks compared to only two bird species (grackles and starlings) on grazed banks. Without stream fencing, livestock may trample grass nests, wade through spawning beds, and muddy the water.

Animal Health Benefits:

■ **Lower Risk of Infection:**

Watering troughs reduce mastitis problems caused when livestock enter muddy streams or spring heads seeking water.

■ **Increase Weight:** A healthy supply of clean water can stimulate appetite and improve milk production in dairy cows.

■ **Avoid Toxins:** Watering troughs reduce the risk of livestock ingesting toxic and potentially fatal algae—such as blue-green algae—that bloom along the edges of streams where animals drink. Also, high levels of nitrates found in many streams are unhealthy for livestock and can threaten the health of unborn calves.

■ **Reduce Risk of Injury:** Muddy areas near streams may also increase foot rot, leg injuries, and stress.

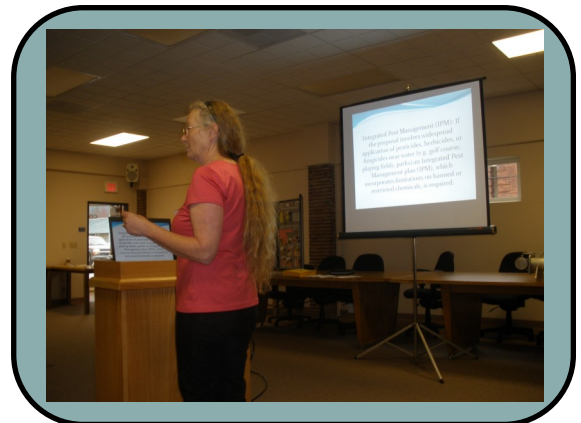
Financial and Technical Assistance:

There are funds available to assist landowners who are willing to fence off streams and creeks and provide alternative water sources to their livestock. Oregon Watershed Enhancement Board offers a small grant program (awards up to \$10,000). Please contact the Coos SWCD if you are interested in learning more.

Phone: 541-396-6879 or email: info@coosswcd.org

Removal-Fill Permit Applications & Fish Passage Workshop

January 21, 2016 Removal-Fill Permit Applications & Fish Passage Workshop - Contact Coos SWCD at 541.396.6979 for more information and to register.



Join Coos SWCD and other local agencies at our Permitting/Fish Passage Workshop on January 21, 2016. We will be assisting landowners with the permitting process, especially as it pertains to dike repair/maintenance, tide gates, and ditch and drainage maintenance. This is a free workshop open to the public. We will have several agencies available to answer questions and assist in how to start the permitting process. Please contact our office at 541.396.6879 for more information and to register for this free workshop (space is limited).

Our Projects

See what Coos SWCD can do for you!

Coos SWCD does multiple projects throughout the year. Below are three projects we have worked on to illustrate the different kinds of water quality issues we can help you with. Give us a call if you have a possible project. We will come out to the site and let you know if we can help you, direct you to another agency or team up with other agencies to give you the best possible outcome. Contact us today to see what we can do for you. Call us at 541.396.6879 or email us at info@coosswcd.org.

In these before and after photos, the problem for this landowner was manure management. They were disposing of their manure and bedding from their horse stables, over a hillside. The issue with doing so was there was a perennial stream at the bottom of the hill. Coos SWCD tackled the first step which was to help the landowner establish several contacts within our community who were interested in using the material as fertilizer. The long term solution for this landowner was to apply for a small grant, with the help of Coos SWCD, to build a covered lean-to storage and composting facility. The after picture shows the completed project.



This K-line sprinkler system project had a significant effect on water quality and quantity. Over irrigation can lead to surface runoff and deep percolation past the vegetation root zone. This can lead to sediments, chemicals, and fertilizers transported into the waterways. To combat these issues, Coos SWCD helped this landowner obtain a grant to purchase and install a K-line sprinkler system. Coos SWCD also assisted the landowner in working with other agencies to improve water quality.

Coos SWCD assisted this landowner with a grant to install an off-channel watering system and fencing that excluded cattle access to the river. Previously this landowner had their livestock grazing the pasture and obtaining their water directly from a nearby river. This can lead to undesirable sediment, nutrient and organic runoff from the pasture. The quality of runoff from grazing lands impacts total water quality of the river, which makes this the perfect project for Coos SWCD.



Got Manure? Need Manure? We want to hear from you!

Coos SWCD is in the process of compiling a list of local people who have manure, either for sale or for free, and people in need of manure for fertilizer. If you would like to be a part of this list, please contact our office today to let us know. We will put you in contact with other local people who can help fulfill your manure needs. Please call us at 541-396-6879 or email us at info@coosswcd.org to find out more information.

We can also help you if you have any questions about being in compliance with the Agricultural Water Quality Management Plan & Rules. Often people believe they are doing the right thing, until someone files a complaint



and the landowner gets a visit from the Oregon Department of Agriculture, and is told they must relocate their manure pile or alter their management. The Coos SWCD is a non-regulatory organization that exists to help landowners avoid such situations. If you have questions or concerns about something on your agricultural property, please do not hesitate to call us. We can provide information, make recommendations, answer questions, and if necessary we have resources to help you address water quality issues.

**COOS SOIL
AND WATER
CONSERVATION
DISTRICT**
*371 N. Adams Street
Coquille, OR 97423*

2015 Newsletter

PLEASE
PLACE
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HERE